

UNITED STATES AIR FORCE

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# OCCUPATIONAL SURVEY REPORT

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CORROSION CONTROL

AFSC 427X1

AFPT 90-427-777

JULY 1988

OCCUPATIONAL ANALYSIS PROGRAM  
USAF OCCUPATIONAL MEASUREMENT CENTER  
AIR TRAINING COMMAND  
RANDOLPH AFB, TEXAS 78150-5000

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## PREFACE

This report presents the results of an Air Force occupational survey of the Corrosion Control career ladder (AFSC 427X1). Authority for conducting specialty surveys is contained in AFR 35-2. Computer products used in this report are available for use by operations and training officials.

Mr William C. Cosgrove, Occupational Analyst, developed the survey instrument, analyzed the survey data, and wrote the final report. Technical Sergeant Joe Seitz provided computer programming support, and Senior Airman John Pratt and Mr Richard G. Ramos provided administrative support. This report has been reviewed and approved for release by Lieutenant Colonel Thomas E. Ulrich, Chief, Airman Analysis Branch, Occupational Analysis Division, USAF Occupational Measurement Center.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies may be requested from the Occupational Measurement Center, Attention: Chief, Occupational Analysis Division (OMY), Randolph AFB, Texas 78150-5000.

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Center

Job analysis. Air Force manual,  
Covers management, technical, development,  
design, protective coatings. (AFSC 427X1)

## SUMMARY OF RESULTS

1. Survey Coverage: Inventory booklets were administered worldwide to Corrosion Control (AFSC 427X1) incumbents during the summer of 1987. The 1,097 respondents in the survey sample represent 65 percent of all assigned Corrosion Control personnel. All major using commands are well represented in the survey sample.
2. Career Ladder Structure: Two clusters and four independent job types were identified in the analysis. Both clusters and one independent job type were directly involved in the performance of various technical duties of the career ladder. The remaining independent job types were oriented toward supervisory, administrative, supply, and quality assurance functions.
3. Career Ladder Progression: The 3- and 5-skill level jobs were quite technical in nature, with very limited responsibilities at the 5-skill level for supervision-type duties. Seven-skill level members, on the other hand, perform limited technical duties while reporting increasing responsibility for supervisory and managerial duties.
4. AFR 39-1 Specialty Description: All descriptions accurately depict the characteristics of the respective jobs. Only two minor adjustments are suggested in the Corrosion Control Specialist description.
5. Training Analysis: Due to the planned RIVET WORKFORCE merger of AFSCs 427X1 and 427X5 into AFSC 458X2 in October 1989, two Specialty Training Standards (STS) were analyzed. The current STS for AFSC 427X1 is generally well supported by survey data, with just a few elements requiring review due to nonsupporting survey data. The same is true for the proposed STS for AFSC 458X2, as it pertains to the corrosion control portion of that STS. The Plan of Instruction (POI) for AFSC 427X1 has seven units of instruction, with some objectives which require review due to the low percentage of first-enlistment airmen performing tasks trained. Some tasks not matched to training documents require evaluation for possible inclusion in the training program.
6. Additional Issues: The request by training personnel for information on the performance of sealing functions and advanced composite structure and honeycomb core repair functions was accommodated by two duty sections in the job inventory. Data reflect that very few airmen perform these functions, with relative time spent on these tasks only 1 percent or less. Information requested by the Air Force Corrosion Program Manager on annual industrial physical examinations was gathered by background questions. The data reflect that a high percentage of AFSC 427X1 personnel have had the required examination during the previous year.
7. Implications: The training program is well grounded and appears to be operating effectively. Only minor adjustments to the STS and POI appear warranted. Data from the survey should be of value in preparing for the proposed RIVET WORKFORCE merger.

OCCUPATIONAL SURVEY REPORT  
CORROSION CONTROL CAREER LADDER  
(AFSC 427X1)

INTRODUCTION

This is a report of an occupational survey of the Corrosion Control career ladder completed by the USAF Occupational Measurement Center in May 1988. The career ladder was previously surveyed in 1979, with the survey results being published in November of that year. The present survey was requested by the 3700th Technical Training Wing, Sheppard Technical Training Center, to obtain current task and equipment data for use in evaluation of current training programs.

In addition to surveying active duty personnel, full-time Reserve Component personnel, including members of Reserve and National Guard units, were also included in this survey. The purpose for including these personnel in the survey was to gather data on them as a group and to determine whether there are discernible differences between active and reserve component categories of personnel. Data gathered from Reserve Component personnel were analyzed separately, and the results will be published in a separate report later this year.

Survey data for active duty AFSC 427X1 personnel will provide much needed information to be used in the upcoming RIVET WORKFORCE-directed merger of AFSC 427X1 and AFSC 427X5, Airframe Repair career ladder. The newly created career ladder will be designated as AFSC 458X2, Aircraft Structural Maintenance Specialty. The implementation date for the merger is tentatively set for 31 October 1989.

Background

Since its creation as a separate career ladder in 1976 with the establishment of AFSC 531X4 from AFSC 530X0, Metal Worker, the 427X1 specialty has had a fairly stable history. In 1977, the AFSC was changed from 531X4 to 427X1, with no change in responsibility. AFR 39-1 specialty descriptions state that AFSC 427X1 personnel identify corrosion and apply preservative treatment to metal surfaces of missiles, aircraft, and support equipment to meet requirements for preservation, elimination of deterioration, and effect corrosion control for Air Force equipment.

Entry into the career ladder is from Basic Military Training School (BMTS) through a Category A, 6-week, 1-day formal training course (3ABR42731) conducted at Sheppard AFB TX. A score of 51 in the mechanical part of the Armed Services Vocational Aptitude Battery (ASVAB) is currently required to enter the career ladder.

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## SURVEY METHODOLOGY

### Inventory Development

Data for this survey were collected using USAF Job Inventory AFPT 90-427-777 (April 1987). The Inventory Developer reviewed pertinent career ladder documents, the previous OSR, and previous inventory, and then prepared a tentative task list. This preliminary task list was then refined and validated through personal interviews with 81 subject-matter experts assigned to operational locations selected to cover a variety of major commands (MAJCOM) and varying functions at the following bases:

| <u>BASE</u>        | <u>REASON FOR VISIT</u>   |
|--------------------|---|
| Sheppard AFB TX    | Location of Technical Training Center   |
| Little Rock AFB AR | Recommended by SAC (MISSILES) Functional Manager, AFMPC Functional Representative, and MAC Functional Manager as a base with varied missions and equipment requiring different corrosion control                    |
| Minot AFB ND       | Recommended by SAC and SAC (MISSILES) Functional Managers and AFMPC Functional Representative as a base with varied equipment and weather conditions which affect corrosion control                                 |
| Barksdale AFB LA   | Recommended by SAC Functional Manager because of high humidity and age of aircraft, which has a bearing on corrosion and its control  |
| England AFB LA     | Recommended by TAC Functional Manager and AFMPC Functional Representative as a base with corrosion-causing climatic conditions  |
| Travis AFB CA      | Recommended by MAC Functional Manager and AFMPC Functional Representative as a base with special aircraft that fly in and out of air bases located on or near salt water, thus creating a corrosion control problem |
| Mather AFB CA      | Recommended by SAC and ATC Functional Managers as a small corrosion control operation with three organizations working on different aircraft  |
| Castle AFB CA      | Recommended by SAC Functional Manager and AFMPC Functional Representative as a base with two organizations having different aircraft and missions   |
| Whiteman AFB MO    | Recommended by SAC (Missile) and MAC Functional Managers as a base with two organizations responsible for missiles and helicopter corrosion control   |

|                 |  |
|-----------------|--|
| MacDill AFB FL  | Recommended by TAC Functional Manager and AFMPC Functional Representative as a base with climatic conditions which would require a great deal of work in the corrosion field |
| Laughlin AFB TX | Recommended by ATC Functional Manager as one of ATC's largest corrosion control shops  |
| Randolph AFB TX | Recommended by ATC Functional Manager and AFMPC Functional Representative as a base with small, but diversified, corrosion control functions                                 |
| George AFB CA   | Recommended by TAC Functional Manager as a base with three organizations performing corrosion control functions in a desert environment on varied aircraft                   |
| Norton AFB CA   | Recommended by MAC and AFLC Functional Managers as a base with a refurbishment function not found at other bases   |
| Nellis AFB NV   | Recommended by TAC Functional Manager and AFMPC Functional Representative as a base with two organizations supporting different aircraft                                     |

The resulting inventory contains a comprehensive list of 918 tasks grouped into 21 duty headings. There are standard background questions asking for grade, duty title, functional level, duty AFSC, time in service, and time in career ladder. In addition, there are questions requesting such information as tools and equipment used, corrosion control materials used, job satisfaction, intent to reenlist, and a number of questions concerning annual industrial physical examinations.

#### Survey Administration

From May through October 1987, Consolidated Base Personnel Offices in worldwide operational units administered the surveys to Corrosion Control military personnel. Participants came from a computer-generated mailing list provided by the Air Force Human Resources Laboratory (AFHRL).

All individuals who filled out an inventory first completed an identification and biographical information section. Next, they answered questions in the background portion of the inventory. They were then directed to go through the booklet and check each task performed in their current job. Finally, they were asked to go back and rate each task they had checked using a 9-point scale reflecting relative time spent on each task compared to all other tasks. Ratings ranged from 1 (indicating a very small amount of time spent) to 9 (indicating a very large amount of time spent). The relative percent time spent on tasks was computed by first totaling all rating values on the inventory. Then the rating value for each task was divided by this total

and the result multiplied by 100. The percent time spent ratings were used with the percent members performing values to help describe the various groups in the career ladder.

### Survey Sample

All eligible military personnel were provided survey booklets. The respondents represent an accurate and proportional representation of MAJCOMs and paygrades for this career ladder. Table 1 reflects how the sample compares to the actual population of the career ladder in terms of the distribution across MAJCOMs, while Table 2 shows the paygrade distribution. These data indicate a good representation of the career ladder in the final survey sample.

### Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected E-6 and E-7 supervisors completed either a training emphasis (TE) or task difficulty (TD) booklet. These booklets were processed separately from the job inventories and the TE and TD data were used in several analyses discussed later in this report.

Training Emphasis (TE). Training emphasis is the amount of structured training that first-term AFSC 427X1 personnel need to successfully perform tasks. Structured training is defined as training provided by resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal OJT, or any other organized training method. Fifty-one experienced supervisors completed TE booklets. They rated the tasks in the inventory on a 10-point scale ranging from no training required (0) to extremely high training emphasis (9). Interrater reliability (as assessed through components of variance of standard group means) for these raters was .94, indicating high agreement among raters.

When TE ratings are used with other information, such as percent members performing and task difficulty, they can provide insight into training requirements and help validate the need for organized training for the career ladder.

Task Difficulty (TD). Task difficulty is defined as the length of time the average airman takes to learn how to perform a task. Forty-six experienced supervisors rated the difficulty of the tasks in the inventory on a 9-point scale ranging from 1 (easy to learn) to 9 (very difficult to learn). Ratings were adjusted so tasks of average difficulty would have a value of 5.0. Interrater reliability (as assessed through components of variance of standard group means) was .95, indicating very high agreement among raters.

TABLE 1  
COMMAND DISTRIBUTION OF AFSC 427X1 MILITARY PERSONNEL

| <u>COMMAND</u> | <u>PERCENT OF<br/>ASSIGNED*</u> | <u>PERCENT OF<br/>SAMPLE**</u> |
|----------------|---------------------------------|--------------------------------|
| TAC            | 31                              | 31                             |
| SAC            | 23                              | 20                             |
| MAC            | 20                              | 22                             |
| USAFE          | 10                              | 8                              |
| ATC            | 7                               | 8                              |
| PACAF          | 5                               | 6                              |
| SYS            | 2                               | 2                              |
| AAC            | 1                               | 1                              |
| OTHER          | 1                               | 2                              |

Total Assigned = 1,698  
 Total Eligible For Survey = 1,507  
 Total In Sample = 1,097  
 Percent Of Assigned In Sample = 65%  
 Percent Of Eligible In Sample = 73%

\* Assigned strength as of 21 April 1987

\*\* Excludes those personnel in PCS, student, or hospital status or with less than 6 weeks on the job

TABLE 2  
PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

| <u>GRADE</u> | <u>PERCENT OF<br/>ASSIGNED*</u> | <u>PERCENT OF<br/>SAMPLE</u> |
|--------------|---------------------------------|------------------------------|
| E-1 THRU E-3 | 36                              | 35                           |
| E-4          | 21                              | 23                           |
| E-5          | 25                              | 25                           |
| E-6          | 11                              | 11                           |
| E-7          | 7                               | 6                            |

\* Assigned strength as of April 1987

TD ratings, when used with percent members performing values and TE ratings, can provide a great deal of insight into training requirements, help validate the need for organized training, and be used to evaluate plans of instruction for the career ladder.

### SPECIALTY JOBS (Career Ladder Structure)

A USAF occupational analysis begins with an examination of the career ladder structure. The structure of jobs within the Corrosion Control career ladder was examined on the basis of similarity of tasks performed and the percent of time spent ratings provided by job incumbents, independent of other specialty background factors.

Each individual in the sample performs a set of tasks called a job. For the purpose of organizing individual jobs into similar units of work, an automated job clustering program is used. This hierarchical grouping program is a basic part of the Comprehensive Occupational Data Analysis Program (CODAP) system for job analysis. Each individual job description (all the tasks performed by that individual and the relative amount of time spent on those tasks) in the sample is compared to every other job description in terms of tasks performed and the relative amount of time spent on each task in the job inventory. The automated system is designed to locate the two job descriptions with the most similar tasks and percent time ratings and combine them to form a composite job description. In successive stages, new members are added to initial groups, or new groups are formed based on the similarity of tasks performed and similar time ratings in the individual job descriptions.

The basic identifying group used in the hierarchical job structuring process is the job type. When there is a substantial degree of similarity between job types, they are grouped together and identified as a cluster. Specialized job types too dissimilar to fit within a cluster are labeled independent job types. The job structure information resulting from this grouping process (the various jobs within the career ladder) can be used to evaluate the accuracy of career ladder documents (AFR 39-1 Specialty Descriptions and Specialty Training Standards) and to gain a better understanding of current utilization patterns. The above terminology will be used in the discussion of the AFSC 427X1 career ladder structure.

#### Overview of Specialty Jobs

Responses from AFSC 427X1 personnel in the survey sample indicate a career ladder where most people perform a rather large number of common tasks. Even so, based on some variations in combinations of tasks performed, structure analysis identified two clusters and four independent job types within the survey sample. Based on task similarity and relative time spent, the division of jobs performed by AFSC 427X1 personnel is illustrated in Figure 1, and a listing of those jobs is provided below. The stage (STG) number shown

## AFSC 427X1 CORROSION CONTROL JOBS

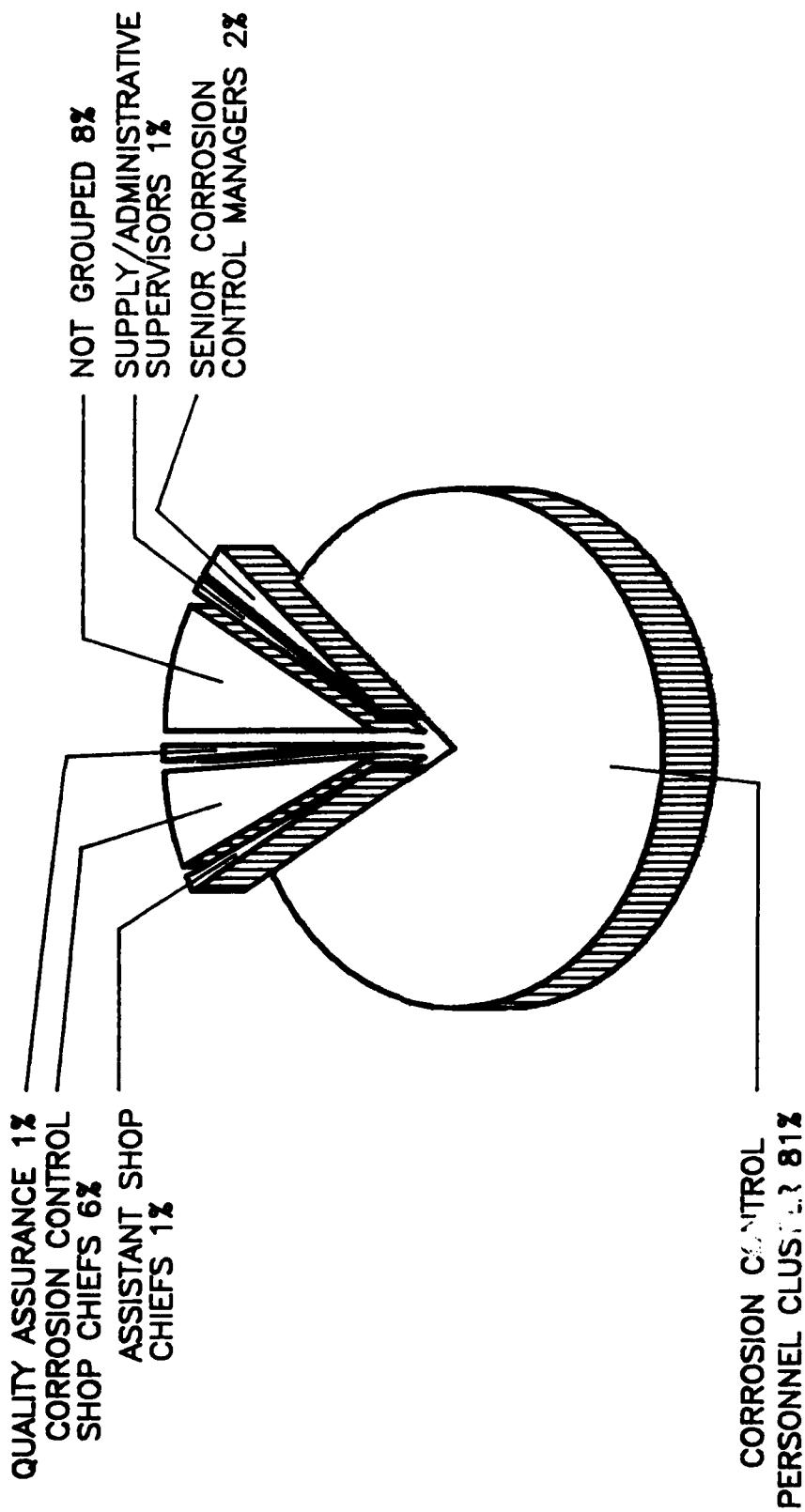


FIGURE 1

beside each title is a reference to computer printed information; the number of personnel in each group (N) is also shown. The reader should be aware that the number of personnel in the subgroups does not always equal the total number shown for a cluster. The jobs performed by those few not included are adequately described by the cluster description.

I. CORROSION CONTROL PERSONNEL CLUSTER (STG047, N=891)

- A. Aircraft/Spray Painters (STG066, N=65)
- B. General Corrosion Control Personnel (STG156, N=125)
- C. Missile Corrosion Control Personnel (STG169, N=22)
- D. Experienced Corrosion Control Personnel (STG196, N=461)
- E. Shift/Crew Leaders (STG201, N=142)

II. ASSISTANT SHOP CHIEFS (STG113, N=13)

III. CORROSION CONTROL SHOP CHIEFS CLUSTER (STG096, N=70)

- A. Missile Shop Chiefs (STG145, N=13)
- B. General Shop Chiefs (STG196, N=55)

IV. SENIOR CORROSION CONTROL MANAGERS (STG101, N=17)

V. SUPPLY/ADMINISTRATIVE SUPERVISORY PERSONNEL (STG090, N=10)

VI. QUALITY ASSURANCE PERSONNEL (STG049, N=12)

The respondents forming these groups account for 92 percent of the survey sample. The remaining 8 percent were performing tasks or series of tasks which did not group them with any of the defined jobs. Job titles given by respondents which were representative of these personnel included Training Material Manager, Destruction Inspection Manager, and Facilities Manager.

Group Descriptions

The following paragraphs contain brief descriptions of the clusters and independent job types identified through the career ladder structure analysis. Selected background data for these groups are provided in Table 3. Representative tasks for all the groups are contained in Appendix A.

I. CORROSION CONTROL PERSONNEL CLUSTER (STG047, N=891). Comprised of five different jobs and representing the largest group in the career ladder structure (81 percent of the total sample), these members form the technical core of the Corrosion Control career ladder. Personnel in this group perform a wide variety of tasks comprising the full range of technical career ladder functions.

TABLE 3  
SELECTED BACKGROUND DATA FOR MEMBERS OF CLUSTERS AND INDEPENDENT JOB TYPES

|                                   | CORROSION<br>CONTROL<br>PERSONNEL<br>CLUSTER | ASSISTANT<br>SHOP<br>CHIEFS | CORROSION<br>CONTROL<br>SHOP<br>CHIEFS | SENIOR<br>CORROSION<br>CONTROL<br>MANAGERS |                         | SUPPLY/<br>ADMINISTRATIVE<br>SUPERVISORS | QUALITY<br>ASSURANCE<br>PERSONNEL |
|-----------------------------------|--|-----------------------------|--|--|-------------------------|--|-----------------------------------|
|                                   |  |                             |  | NUMBER IN GROUP                            | PERCENT IN TOTAL SAMPLE | PERCENT IN CONUS                         |                                   |
|                                   | 891  | 13                          | 70                                     | 17   | 10                      | 12                                       |                                   |
|                                   | 81%  | 1%                          | 6%                                     | 2%   | 1%                      | 1%                                       |                                   |
|                                   | 79%  | 69%                         | 84%                                    | 71%  | 70%                     | 83%                                      |                                   |
| DAFSC DISTRIBUTION                |  |                             |  |  |                         |  |                                   |
| 42731                             | 15%  | 8%                          | *                                      | *  | *                       | *  | *                                 |
| 42751                             | 67%  | 46%                         | 9%                                     | 6%   | 40%                     | 25%                                      |                                   |
| 42771                             | 18%  | 46%                         | 91%                                    | 94%  | 60%                     | 75%                                      |                                   |
| PAYGRADE DISTRIBUTION             |  |                             |  |  |                         |  |                                   |
| E-1 to E-3                        | 41%  | *                           | *                                      | *  | *                       | *  | *                                 |
| E-4                               | 26%  | 8%                          | 1%                                     | *  | *                       | *  | 8%                                |
| E-5                               | 26%  | 61%                         | 10%                                    | 6%   | 40%                     | 42%                                      |                                   |
| E-6                               | 6%   | 23%                         | 54%                                    | 29%  | 60%                     | 25%                                      |                                   |
| E-7                               | 1%   | 8%                          | 34%                                    | 65%  | *                       | 25%                                      |                                   |
| AVERAGE MONTHS IN CAREER FIELD    |  |                             |  |  |                         |  |                                   |
| AVERAGE MONTHS TAFMS              | 59   | 137                         | 160                                    | 160  | 136                     | 130                                      |                                   |
| PERCENT FIRST ENLISTMENT          | 64   | 141                         | 178                                    | 205  | 146                     | 133                                      |                                   |
| PERCENT SUPERVISING               | 52%  | *                           | *                                      | *  | *                       | 8%                                       |                                   |
| AVERAGE NUMBER OF TASKS PERFORMED | 35%  | 85%                         | 94%                                    | 76%  | 90%                     | 8%                                       |                                   |
|                                   | 194  | 194                         | 220                                    | 83   | 65                      | 91                                       |                                   |

\* Indicates less than 1 percent

More than 73 percent of their relative job time is devoted to tasks associated with applying protective coating to surfaces, performing general corrosion control functions, maintaining corrosion control equipment, removing corrosion and protective coatings, and performing maintenance on safety equipment. Of the average 194 tasks performed, typical ones include:

- preparing surfaces using pneumatic sanders
- applying masking materials to surfaces
- removing masking materials from surfaces
- mixing paints
- preparing polyurethane coating for application
- cleaning equipment after applying protective coatings
- cleaning respirators

Although five jobs were identified within the cluster, three of them (Aircraft/Spray Painters, General Corrosion Control Personnel, and Experienced Corrosion Control Personnel) differed primarily because of the experience level of the groups and the increasing average number of tasks performed. Of the two remaining jobs, the Missile Corrosion Control Personnel job was identified as a result of the amount of relative time spent in the missile areas. The final job, Shift/Crew Leader Personnel, perform the broadest spectrum of tasks of any group in the survey. Their average of 334 tasks includes not only the technical corrosion control tasks, but also tasks in the supervisory functional area.

Members of this cluster report an average grade of E-4, with an average of about 5 years in both the career field and TAFMS. Fifty-two percent are still in their first enlistment, and 67 percent report holding a 5-skill level DAFSC.

II. ASSISTANT SHOP CHIEFS (STG113, N=13). The 13 members (1 percent of sample) forming this independent job perform a rather broad spectrum of tasks, including many technical tasks. They are, however, differentiated from the other groups in the survey because of the relative time spent (54 percent) performing general corrosion control, administrative, and supply tasks, including the maintenance of safety and corrosion control equipment. The average grade for these individuals is E-5, while they average 11 years in the career field. Typical tasks of the 194 average performed include:

- maintaining AF Forms 2413 (Supply Control Log Forms)
- initiating AF Forms 2005 (Issue/Turn in Requests)
- reviewing priority monitor reports (D-18)
- inspecting face shields for condition and cleanliness
- inspecting air hoses
- driving government vehicles, such as sedans and trucks

III. CORROSION CONTROL SHOP CHIEFS CLUSTER (STG096, N=70). This cluster of 70 individuals represents 6 percent of the survey sample. They perform a wide range of tasks, averaging 220 per individual. A great deal of their duty time is dedicated to organizing, planning, inspecting, evaluating, performing administrative functions, directing, and implementing. In addition to these duties, representing 60 percent of their relative duty time, they spend another 26 percent of their time performing general supply and training tasks, plus tasks in the technical duties of general corrosion control, maintenance of safety equipment, and inspection of aircraft, support equipment, and missiles. This group has an average grade of E-6, with an average of 13 years in the career field and 14 years TAFMS. Typical tasks performed by these supervisors include:

- writing APR
- planning work assignments
- evaluating individual job performance
- establishing work priorities
- directing shop maintenance activities
- assigning OJT trainers
- reviewing daily document registers (D04)
- reviewing priority monitor reports (D-18)

Within the cluster are two different jobs, General Corrosion Control Shop Chiefs and Missile Corrosion Control Shop Chiefs. The differences between these two groups are that the General Corrosion Control Shop Chiefs report a broader range of tasks performed (average of 248 vs 113) and the Missile Corrosion Control Shop Chiefs perform missile-related tasks and are members of missile maintenance organizations.

IV. SENIOR CORROSION CONTROL MANAGERS (STG101, N=17). This independent job type of 17 individuals represents 2 percent of the survey sample. They perform an average of only 83 tasks in a rather narrow job. Seventy-eight percent of their relative time is spent in the performance of organizing, planning, inspecting, evaluating, directing, implementing, and administrative-type tasks. This is the most senior group of the survey, with the average grade of its members being E-7. They have an average of 15 years in the career field and 17 years TAFMS. Typical tasks performed by these managers include:

- counseling personnel on personal or military-related problems
- supervising corrosion control supervisors (AFSC 427X1)
- interpreting directives for subordinates
- establishing performance standards
- indorsing APR
- writing special reports

V. SUPPLY/ADMINISTRATIVE SUPERVISORY PERSONNEL (STG090, N=10). These 10 members, representing 1 percent of the sample, have the narrowest job of any group in the survey, averaging only 65 tasks per individual. They spend 80 percent of their relative time organizing and planning, inspecting, evaluating, directing, implementing, and performing supply and administrative functional tasks. The members have an average grade of E-6 and average 11 years in the career field. Typical tasks performed include:

- planning work assignments
- counseling personnel on personal or military-related problems
- coordinating flightline dispatch work with job control
- maintaining AF Forms 2413 (Supply Control Logs)
- reviewing priority monitor reports (D-18)
- writing APR

VI. QUALITY ASSURANCE PERSONNEL (STG049, N=12). The 12 members (1 percent of sample) forming this independent job group are differentiated from the overall sample because of their specialization on tasks pertaining to inspecting and evaluating. They spend 60 percent of their relative time on tasks involved in inspecting, evaluating, performing maintenance on safety equipment, performing administrative functions, and inspecting aircraft, support equipment, and missiles. These comparatively senior personnel, with an average grade of E-6 and an average of 10 years in the career field, perform a rather narrow job, averaging only 91 tasks per individual. The title most frequently provided by these individuals was Quality Assurance Inspector. Typical quality assurance tasks performed by these personnel include:

- performing inspections using technical orders (TO)
- evaluating compliance with performance standards
- inspecting the condition and cleanliness of different pieces of safety apparel
- inspecting condition of protective coating
- evaluating individual job performance
- inspecting safety equipment
- evaluating maintenance of equipment
- evaluating administrative functions

#### Summary

Two clusters and four independent job types were identified in the career ladder structure analysis. The majority of career ladder incumbents (81 percent) grouped into one cluster (Corrosion Control Personnel), which performed the full range of the technical corrosion functions. Other smaller job groups were involved not only with technical aspects of the career ladder, but also were heavily involved with supervisory, supply, and administrative areas. No noteworthy degree of specialization within the career ladder was identified. The career ladder appears to be very homogeneous, with the vast majority of

personnel performing essentially the same basic job. Thus, the specialty job analysis and the survey data tend to support the current career ladder structure.

#### Comparison of Current Survey to Previous Survey

The results of the specialty job analysis were compared to those of Occupational Survey Report (OSR) AFPT 90-427-385, CORROSION CONTROL, dated November 1979. Table 4 displays a comparison of the Corrosion Control specialty jobs identified in each of the two studies. After reviewing the tasks comprising the jobs identified in 1979, it was determined that most of the groups could be linked with similar task performances by 1987 sample groups. The appearance of differences (i.e., some of the specific job titles) is a surface difference only, and can be attributed to modifications to the task list or to the analysis and the analytical approach used.

Aside from some minor variations involving small numbers of personnel (i.e., the identification of the Supply/Administrative Supervisory Personnel), it can be stated that the vast majority of the current sample could be matched to AFSC 427X1 jobs identified in 1979, thus displaying a relatively stable career ladder over time.

#### ANALYSIS OF DAFSC GROUPS

DAFSC analysis identifies similarities and differences in task and duty performance at the various skill levels. This information may then be used to evaluate how well career ladder documents, such as AFR 39-1 Specialty Descriptions and the STS, reflect what career ladder personnel are actually doing in the field.

Comparison of the duty and task performance between DAFSC 42731 and 42751 personnel indicated that, while there are some minor differences, the jobs they perform are essentially the same. These two groups have an 87 percent time-spent overlap on common tasks, which supports the premise that they have the same job. Therefore, they will be discussed as a combined group in this report. Survey data, if desired, will also be available for each separate skill level.

The distribution of skill-level personnel (AFSCs 42731/51 and 42771) across major specialty jobs is reflected in Table 5, while Table 6 shows the relative time spent on each duty for each skill-level group.

The AFSC 427X1 career ladder shows a very typical career progression pattern as one advances from skill level to skill level. As shown in Table 6, personnel in the 3- and 5-skill levels are spending the majority of their job time in technical duties (Duties G, H, I, J, K, L, M, Q, and R). At the 7-skill level, percent time spent in these technical duty areas drops substantially, from 86 percent for 3- and 5-skill levels to 46 percent for the

TABLE 4  
JOB SPECIALTY COMPARISONS BETWEEN CURRENT AND 1979 SURVEY

| <u>CURRENT SURVEY (N=1,079)</u>                    | <u>PERCENT OF SAMPLE</u> | <u>1979 SURVEY (N=1,122)</u>  | <u>PERCENT OF SAMPLE</u> |
|--|--------------------------|---|--------------------------|
| CORROSION CONTROL PERSONNEL CLUSTER (N=891)        | 81                       | APPLICATIONS AND REMOVAL PERSONNEL (N=699)<br>EXPERIENCED CRAFTSMEN (N=154)<br>MISSILE CORROSION PERSONNEL (N=37)<br>SPRAY PAINTERS (N=6) | 62<br>14<br>3<br>.5      |
| QUALITY ASSURANCE PERSONNEL (N=12)                 | 1                        | QUALITY CONTROL PERSONNEL (N=6)   | .5                       |
| SUPPLY/ADMINISTRATIVE SUPERVISORY PERSONNEL (N=10) | 1                        | NOT IDENTIFIED  | -                        |
| CORROSION CONTROL SHOP CHIEF CLUSTER (N=70)        | 6                        | CORROSION CONTROL SHOP CHIEFS (N=6)   | .5                       |
| SENIOR CORROSION CONTROL MANAGERS (N=17)           | 2                        | FABRICATION BRANCH SUPERVISORS (N=43)   | 4                        |
| ASSISTANT SHOP CHIEFS (N=13)                       | 1                        | NOT IDENTIFIED  | -                        |

TABLE 5  
DISTRIBUTION OF DAFSC MEMBERS ACROSS SPECIALITY JOBS

| SPECIALTY JOBS                         | DAFSC 42731/51<br>(N=794) |            | DAFSC 42771<br>(N=303) |             |
|--|---------------------------|------------|------------------------|-------------|
|  | NUMBER                    | PERCENT    | NUMBER                 | PERCENT     |
| I. CORROSION CONTROL PERSONNEL CLUSTER | 730                       | 92%        | 161                    | 53%         |
| II. ASSISTANT SHOP CHIEFS              | 7                         | 1%         | 6                      | 2%          |
| III. SHOP CHIEF CLUSTER                | 6                         | 1%         | 64                     | 21%         |
| IV. SENIOR MANAGERS                    | 1                         | *          | 16                     | 5%          |
| V. SUPPLY/ADMINISTRATIVE SUPERVISORS   | 4                         | 1%         | 6                      | 2%          |
| VI. QUALITY ASSURANCE PERSONNEL        | 3                         | *          | 9                      | 3%          |
| NOT GROUPED                            | 43                        | 5%<br>100% | 41                     | 14%<br>100% |

\* Denotes less than .5 percent

TABLE 6  
AVERAGE PERCENT TIME SPENT  
PERFORMING DUTIES BY DAFSC GROUPS

| DUTIES   | DAFSC<br>42731/42751<br>(N=794) | DAFSC<br>42771<br>(N=303) |
|--|---------------------------------|---------------------------|
| A ORGANIZING AND PLANNING  | 3                               | 10                        |
| B DIRECTING AND IMPLEMENTING   | 2                               | 7                         |
| C INSPECTING AND EVALUATING  | 3                               | 10                        |
| D TRAINING   | 1                               | 5                         |
| E PERFORMING ADMINISTRATIVE FUNCTIONS  | 3                               | 8                         |
| F PERFORMING GENERAL SUPPLY FUNCTIONS  | 1                               | 4                         |
| G PERFORMING GENERAL CORROSION CONTROL FUNCTIONS                                 | 19                              | 11                        |
| H INSPECTING AIRCRAFT, SUPPORT EQUIPMENT, AND<br>MISSILES                        | 4                               | 5                         |
| I TREATING AIRCRAFT AND SUPPORT EQUIPMENT  | 3                               | 2                         |
| J REMOVING CORROSION AND PROTECTIVE COATING                                      | 11                              | 6                         |
| K TREATING AND PREPARING METAL SURFACES  | 5                               | 3                         |
| L APPLYING PROTECTIVE COATING TO SURFACES  | 21                              | 11                        |
| M MAINTAINING CORROSION CONTROL EQUIPMENT  | 12                              | 8                         |
| N PERFORMING MISSILE DISPATCH FUNCTIONS  | *                               | *                         |
| O PERFORMING MINUTEMAN CORROSION CONTROL FUNCTIONS                               | *                               | *                         |
| P PERFORMING TITAN MISSILE CORROSION CONTROL<br>FUNCTIONS                        | *                               | *                         |
| Q PERFORMING MAINTENANCE ON SAFETY EQUIPMENT                                     | 10                              | 8                         |
| R PERFORMING SEALING FUNCTIONS   | 1                               | *                         |
| S PERFORMING ADVANCED COMPOSITE STRUCTURE AND<br>HONEYCOMB CORE REPAIR FUNCTIONS | *                               | *                         |
| T PERFORMING AND PRACTICING DISASTER PREPAREDNESS<br>FUNCTIONS                   | 1                               | 1                         |
| U PERFORMING CROSS UTILIZATION TRAINING (CUT)<br>FUNCTIONS                       | *                               | *                         |

\* Denotes less than 1 percent

7-skill level group. Even with this rather large drop in percent time spent on technical tasks, there is still a 65 percent overlap between the two groups. The overlap between the two groups shows the homogeneity of the AFSC, while the clear shift in relative time spent on the performance of supervisory and managerial duties (Duties A, B, and C) at the 7-skill level reflects a logical and typical career progression for the career ladder. Table 7 provides a different perspective by displaying representative tasks for each group and showing differences in relative time spent between them.

#### Skill Level Descriptions

DAFSC 42731/51. The 794 airmen in the 3- and 5-skill level group (representing 72 percent of the survey sample) performed an average of 175 tasks, with 50 percent of their time spent on 110 tasks. Performing a highly technical job, 51 percent of their relative duty time is devoted to performing general corrosion control functions, removing corrosion and protective coatings, and applying protective coatings. An additional 22 percent of their time is spent in maintaining corrosion control and safety equipment. As shown in Table 5, 92 percent of these airmen are included in the technically-oriented job of Corrosion Control Personnel. Table 7 displays selected tasks representative of those performed by a majority of these airmen (see highlighted column upper half of table) and compared with responses provided by 7-skill level personnel. The arrangement of this table provides an easy method of comparing the commonality and differences between the two groups. As can be quickly ascertained, tasks common to 3- and 5-skill level personnel are also performed by fairly high percentages of the 7-skill level members.

DAFSC 42771. Seven-skill level personnel (28 percent of the survey sample) perform an average of 196 tasks, with 157 tasks taking up over 50 percent of their relative time. Eighty percent of 7-skill level personnel report supervising one or more individuals, but only 40 percent of their relative time is spent on tasks in the usual supervisory, managerial, training, and administrative duties (see Table 6). This relatively low supervisory activity is also highlighted by the fact that only 30 percent of the 303 people forming this group are found in the four jobs which are clearly supervisory in nature (Assistant Shop Chiefs, Corrosion Control Shop Chiefs, Senior Corrosion Control Managers, and Supply/Administrative Supervisors) as discussed earlier in the SPECIALTY JOBS section. Table 5 reflects that 53 percent of these people are in the technically-oriented jobs found in the Corrosion Control Personnel cluster. The highlighted portion of Table 7 clearly shows that the senior personnel are responsible for supervision, while the upper portion of the table reflects the wide range of technical tasks a high percentage of these individuals also perform.

TABLE 7

DISPLAY OF REPRESENTATIVE TASKS FOR  
AND DIFFERENCES BETWEEN DAFSC GROUPS  
(PERCENT MEMBERS PERFORMING)

| TASKS  | 42731/42751<br>(N=794) | 42771<br>(N=303) |
|--|------------------------|------------------|
| G239 APPLY MASKING MATERIALS TO SURFACES                     | 91                     | 67               |
| G248 CLEAN WORK AREAS  | 91                     | 64               |
| J452 REMOVE PROTECTIVE COATINGS USING PNEUMATIC<br>SANDERS   | 91                     | 64               |
| G297 REMOVE MASKING MATERIALS FROM SURFACES                  | 90                     | 66               |
| G294 PREPARE SURFACES USING PNEUMATIC SANDERS                | 89                     | 63               |
| L585 MIX PAINTS  | 89                     | 63               |
| L591 PREPARE POLYURETHANE COATINGS FOR APPLICATION           | 86                     | 64               |
| L592 PREPARE PRIMERS FOR APPLICATION                         | 81                     | 59               |
| L510 APPLY AIRCRAFT MARKINGS USING STENCILS                  | 80                     | 57               |
| G287 PREPARE SURFACES BY HAND SANDING                        | 80                     | 55               |
| Q772 CLEAN RESPIRATORS                                       | 79                     | 55               |
| L538 APPLY LACQUERS TO SURFACES USING AEROSOL<br>SPRAYS      | 79                     | 53               |
| K496 SCUFF UP METAL SURFACES                                 | 77                     | 53               |
| K497 SCUFF UP PAINTED SURFACES                               | 77                     | 53               |
| J408 REMOVE CORROSION USING HAND WIRE BRUSHES                | 76                     | 54               |
| M622 CLEAN PNEUMATICALLY POWERED TOOLS                       | 75                     | 50               |
| G277 PERFORM JANITORIAL DUTIES, SUCH AS CLEANING<br>LATRINES | 65                     | 30               |
| M621 CLEAN PAINTING EQUIPMENT, SUCH AS BRUSHES OR<br>ROLLERS | 61                     | 36               |
| I343 CLEAN AIRCRAFT PARTS USING BRUSHES                      | 56                     | 32               |

|      |  |    |    |
|------|--|----|----|
| C126 | WRITE APR  | 23 | 80 |
| B76  | SUPERVISE CORROSION CONTROL SPECIALISTS (AFSC<br>42751)    | 28 | 73 |
| B51  | COUNSEL PERSONNEL ON PERSONAL OR MILITARY<br>RELATED AREAS | 22 | 72 |
| B71  | ORIENT NEWLY ASSIGNED PERSONNEL                            | 31 | 70 |
| A46  | SCHEDULE WORK ASSIGNMENTS                                  | 20 | 64 |
| A36  | PLAN WORK ASSIGNMENTS                                      | 17 | 61 |
| C87  | EVALUATE USE OF SUPPLIES                                   | 17 | 57 |
| B59  | DIRECT UTILIZATION OF CORROSION CONTROL SHOP<br>EQUIPMENT  | 14 | 53 |
| F237 | REVIEW MONTHLY DUE-OUT VALIDATION REPORTS                  | 11 | 52 |
| C86  | EVALUATE USE OF EQUIPMENT                                  | 15 | 51 |
| D158 | MAINTAIN TRAINING RECORDS                                  | 14 | 50 |
| E215 | REVIEW PRIORITY MONITOR REPORTS (D-18)                     | 10 | 47 |
| D131 | ASSIGN OJT TRAINERS  | 4  | 40 |

### Summary

Career ladder progression is evident, with personnel at the 3- and 5-skill levels spending the vast majority of their job time performing technical tasks. At the 7-skill level, although members spend more than half their relative duty time in the technical areas of the AFSC duties, the shift to supervisory functions is still quite clear.

### ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS

Survey data were compared to the AFR 39-1 Specialty Descriptions for Corrosion Control Specialists and Supervisors, both dated 1 February 1988. Each speciality description will be discussed separately.

The description for the 3- and 5-skill levels is quite accurate in describing the overall job performed by these personnel. There is, however, one item in the AFR 39-1 Specialty Description that needs to be reviewed. The task statements in paragraph 2a pertaining to determination of metal identity by subjecting it to chemical and mechanical tests need to be deleted or deemphasized. The highest response for chemical testing methods identifying metal was only 6 percent. The highest response for mechanical testing methods was 12 percent of 5-skill level using the magnetic test, and no more than 5 percent using the other four testing methods.

The Corrosion Control Supervisor description accurately reflects both the supervisory and technical aspects of the 7-skill level job. The high percent of members performing and the relative time spent in the technical areas is very succinctly covered by the concise description for performing technical corrosion control functions section of the regulation.

### TRAINING ANALYSIS

Occupational survey data are one of the many sources of information that can be used to assist in the development of a training program which is relevant to the needs of personnel in their first enlistment. Factors which may be used in evaluating training include the overall description of the job being performed by first-enlistment personnel and their overall distribution across career ladder jobs, percentages of first-job (1-24 month TAFMS) or first-enlistment (1-48 months TAFMS) members performing specific tasks or using certain equipment or materials, as well as TE and TD ratings (previously explained in the SURVEY METHODOLOGY section).

To assist specifically in the evaluation of the Specialty Training Standards (STS) and the Plan of Instruction (POI), technical school personnel from Sheppard Technical Training Center matched job inventory tasks to appropriate sections and subsections of the AFSC 427X1 STS, AFSC 458X2 proposed draft STS,

and 3ABR42731 000 POI. It was this matching upon which comparison to those documents was based. A complete computer listing displaying the percent members performing tasks, TE and TD ratings for each task, along with the STS and POI matchings, has been forwarded to the technical school for their use in further detailed reviews of training documents. A summary of this information is presented below.

#### First-Enlistment Personnel

There are 481 DAFSC 427X1 members in their first enlistment (1-48 months TAFMS), representing 44 percent of the total survey sample. The job performed by these personnel is very technically oriented and covers the gamut of corrosion control technical activities. As reflected in Table 8, approximately 91 percent of their duty time is devoted to technical task performance. Distribution of these personnel across the career ladder jobs is displayed in Figure 2, which shows 97 percent of the respondents working in the Corrosion Control Personnel cluster, with less than 1 percent in the other job types and all others ungrouped. Table 9 shows representative tasks performed by first-enlistment AFSC 427X1 personnel.

One of the objectives of this survey project was to gather data for the technical training center pertaining to types of tools or equipment and corrosion control materials used by personnel in the field. Tables 10 and 11 present percentages of first-term airmen responding to questions concerning their activities involving these items. This type of information is useful to both the technical school and MAJCOM training personnel, to assist them in focusing limited training time or other resources on the most appropriate types of equipment and materials. This should also be of value during the merger efforts.

#### Training Emphasis and Training Difficulty Data

Tasks having the highest TE ratings are listed in Table 12. Included for each task are also the percentage of first-enlistment personnel performing and the TD rating. The tasks listed are all technical in nature. They should not be considered as all-inclusive or the only ones to be reviewed. Table 13 lists the tasks having the highest TD ratings. The percentage of first-enlistment personnel performing and the TE rating are also included for each task. The majority of these tasks are not technically-oriented corrosion control tasks, nor are they performed by many first-enlistment personnel. The list should not be considered as all-inclusive. TE and TD data are secondary factors that can assist technical school personnel in deciding what tasks should be emphasized in entry-level training. These ratings, based on the judgements of senior career ladder NCO working at operational units in the field, are collected to provide training personnel with a rank-ordering of those tasks considered important for first-term airmen training (TE), along with a measure of the difficulty of those tasks (TD). When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can then be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors, accompanied by

TABLE 8  
RELATIVE TIME SPENT ON DUTIES  
BY FIRST-ENLISTMENT PERSONNEL  
(1-48 MONTHS TAFMS)

| DUTIES  | PERCENT TIME SPENT |
|---|--------------------|
| A ORGANIZING AND PLANNING   | 2                  |
| B DIRECTING AND IMPLEMENTING  | 1                  |
| C INSPECTING AND EVALUATING   | 2                  |
| D TRAINING  | *                  |
| E PERFORMING ADMINISTRATIVE FUNCTIONS   | 2                  |
| F PERFORMING GENERAL SUPPLY FUNCTIONS   | 1                  |
| G PERFORMING GENERAL CORROSION CONTROL FUNCTIONS                              | 20                 |
| H INSPECTING AIRCRAFT, SUPPORT EQUIPMENT, AND MISSILES                        | 4                  |
| I TREATING AIRCRAFT AND SUPPORT EQUIPMENT                                     | 3                  |
| J REMOVING CORROSION AND PROTECTIVE COATING                                   | 12                 |
| K TREATING AND PREPARING METAL SURFACES                                       | 5                  |
| L APPLYING PROTECTIVE COATING TO SURFACES                                     | 23                 |
| M MAINTAINING CORROSION CONTROL EQUIPMENT                                     | 13                 |
| N PERFORMING MISSILE DISPATCH FUNCTIONS                                       | *                  |
| O PERFORMING MINUTEMAN CORROSION CONTROL FUNCTIONS                            | *                  |
| P PERFORMING TITAN MISSILE CORROSION CONTROL FUNCTIONS                        | *                  |
| Q PERFORMING MAINTENANCE ON SAFETY EQUIPMENT                                  | 10                 |
| R PERFORMING SEALING FUNCTIONS  | 1                  |
| S PERFORMING ADVANCED COMPOSITE STRUCTURE AND HONEYCOMB CORE REPAIR FUNCTIONS | *                  |
| T PERFORMING AND PRACTICING DISASTER PREPAREDNESS FUNCTIONS                   | 1                  |
| U PERFORMING CROSS UTILIZATION TRAINING (CUT) FUNCTIONS                       | *                  |

\* Denotes less than 1 percent

FIRST-ENLISTMENT AFSC 427X1 PERSONNEL  
IN SPECIALTY JOBS  
(N=481)

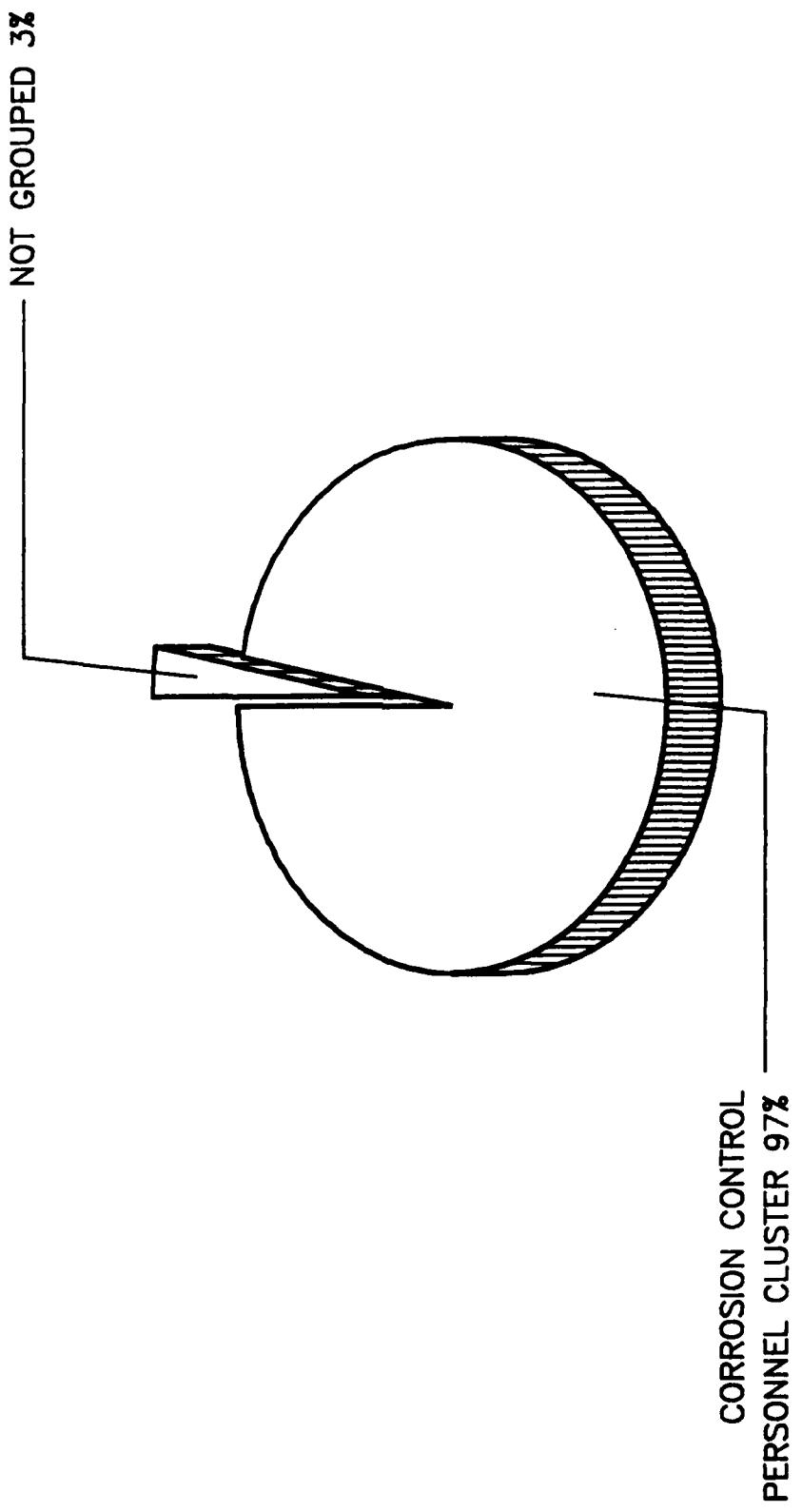


FIGURE 2

TABLE 9  
REPRESENTATIVE TASKS PERFORMED  
BY 427X1 FIRST-ENLISTMENT PERSONNEL  
(1-48 MONTHS TAFMS)

| TASKS   | PERCENT<br>MEMBERS<br>PERFORMING<br>(N=481) |
|---|---|
| G239 APPLY MASKING MATERIALS TO SURFACES  | 95  |
| G297 REMOVE MASKING MATERIALS FROM SURFACES   | 93  |
| Q248 CLEAN WORK AREAS   | 92  |
| G294 PREPARE SURFACES USING PNEUMATIC SANDERS   | 91  |
| L585 MIX PAINTS   | 91  |
| L591 PREPARE POLYURETHANE COATINGS FOR APPLICATION  | 90  |
| J452 REMOVE PROTECTIVE COATINGS USING PNEUMATIC SANDERS   | 86  |
| G275 PAINT SIGNS  | 83  |
| J445 REMOVE PROTECTIVE COATINGS USING PAINT REMOVERS  | 83  |
| L510 APPLY AIRCRAFT MARKINGS USING STENCILS   | 83  |
| L592 PREPARE PRIMERS FOR APPLICATION  | 83  |
| G278 PERFORM MAINTENANCE USING TO   | 82  |
| K503 WIPE DOWN METAL SURFACES WITH THINNERS PRIOR TO PAINTING                                     | 81  |
| L603 STRAIN PAINTS  | 81  |
| Q772 CLEAN RESPIRATORS  | 80  |
| K497 SCUFF UP PAINTED SURFACES  | 79  |
| M619 CLEAN EQUIPMENT AFTER APPLYING PROTECTIVE COATINGS   | 78  |
| M622 CLEAN PNEUMATICALLY POWERED TOOLS  | 78  |
| L551 APPLY POLYURETHANE COATINGS TO SURFACES USING SUCTION FEED<br>SPRAY GUNS                     | 76  |
| M647 LAY DOWN AIRCRAFT BARRIER PAPER  | 75  |
| Q765 CHANGE RESPIRATOR FILTERS  | 75  |
| H331 INSPECT AREAS FOR CORROSION USING HAND EQUIPMENT, SUCH AS<br>FLASHLIGHTS, PROBES, OR MIRRORS | 73  |
| L558 APPLY PRIMERS TO SURFACES USING SUCTION FEED SPRAY GUNS                                      | 73  |
| L511 APPLY CAMOUFLAGE COATINGS TO AIRCRAFT  | 68  |
| M626 CLEAN SUCTION FEED SPRAY EQUIPMENT   | 68  |
| I352 MIX ALODINE SOLUTIONS  | 42  |

\* Average number of tasks performed - 166

TABLE 10  
TOOLS OR EQUIPMENT USED BY 50 PERCENT OR  
MORE OF FIRST ENLISTMENT PERSONNEL  
(1-48 MONTHS TAFMS)

| <u>TOOLS OR EQUIPMENT USED</u> | <u>PERCENT<br/>MEMBERS<br/>RESPONDING<br/>(N=481)</u> |
|--------------------------------|---|
| AEROSOL SPRAY CANS             | 96  |
| STENCIL CUTTING MACHINES       | 95  |
| CONVENTIONAL PAINT SPRAY GUNS  | 92  |
| HAND WIRE BRUSHES              | 92  |
| PAINT BRUSHES                  | 92  |
| AIR COMPRESSORS                | 91  |
| ABRASIVE MATS                  | 90  |
| FLASHLIGHTS                    | 90  |
| PAINT SHAKERS                  | 90  |
| ABRASIVE PAPERS                | 89  |
| ABRASIVE DISCS                 | 87  |
| RAZORS                         | 86  |
| PNEUMATIC SANDERS              | 86  |
| PAINT SCRAPERS                 | 81  |
| CHEESECLOTH                    | 80  |
| MAINTENANCE STANDS             | 79  |
| INSPECTION MIRRORS             | 78  |
| STENCIL KNIVES                 | 78  |
| CARTRIDGE RESPIRATORS          | 77  |
| AEROSOL SPRAY POWER PACKS      | 75  |
| STRAIGHT EDGES                 | 75  |
| STRAINERS                      | 75  |
| PAPER CUTTERS                  | 71  |
| AIR SUPPLY RESPIRATORS         | 69  |
| DISPOSABLE RESPIRATORS         | 69  |
| PNEUMATIC GRINDERS             | 69  |
| PNEUMATIC DRILLS               | 66  |
| TACK RAGS                      | 64  |
| ABRASIVE WHEELS                | 63  |
| PAINT ROLLERS                  | 63  |
| STRIPPING TANKS                | 61  |
| PAINT ROLLING PANS             | 60  |
| PRESSURE POTS                  | 58  |
| ABRASIVE BLASTERS              | 57  |
| PHENOLIC SCRAPERS              | 52  |
| AIRCRAFT MARKING PENCILS       | 50  |
| MAGNIFYING GLASSES             | 50  |

TABLE 11

CORROSION CONTROL MATERIALS USED BY 50 PERCENT  
 OR MORE OF FIRST ENLISTMENT PERSONNEL  
 (1-48 MONTHS TAFMS)

| <u>CORROSION CONTROL MATERIALS USED</u> | <u>PERCENT<br/>MEMBERS<br/>RESPONDING<br/>(N=481)</u> |
|---|---|
| METHYL-ETHYL-KEYTONE (MEK)              | 96  |
| PRIMERS                                 | 93  |
| THINNERS                                | 93  |
| LACQUERS                                | 92  |
| ENAMELS                                 | 88  |
| POLYURETHANE COATINGS                   | 88  |
| EPOXY                                   | 86  |
| ZINC-CHROMATE PRIMER                    | 86  |
| WALKWAY COATINGS                        | 75  |
| NAPTHA                                  | 71  |
| CORROSION PREVENTING COMPOUNDS (CPC)    | 69  |
| SOLVENTS                                | 65  |
| TOLUOL, TOLUENE                         | 65  |
| PAINT REMOVER, MIL-R-25134              | 59  |
| RAIN EROSION RESISTANT POLYURETHANE     | 59  |
| EDGE SEALERS                            | 58  |
| ALKALINE WATER BASE CLEANERS            | 56  |

TABLE 12

TASKS WITH HIGHEST TRAINING EMPHASIS RATINGS  
(AFSC 427X1)

| TASKS   | TNG<br>EMP | PERCENT<br>FIRST<br>ENLISTMENT<br>(N=481) | TASK<br>DIFF |
|---|------------|---|--------------|
|   |            |   |              |
| H326 IDENTIFY TYPES OF CORROSION  | 6.69       | 70  | 5.51         |
| G278 PERFORM MAINTENANCE USING TO   | 6.35       | 82  | 5.15         |
| H323 DETERMINE SEVERITY OF CORROSION  | 6.29       | 66  | 6.14         |
| H331 INSPECT AREAS FOR CORROSION USING HAND EQUIPMENT, SUCH AS<br>FLASHLIGHTS, PROBES, OR MIRRORS | 6.20       | 26  | 5.10         |
| L591 PREPARE POLYURETHANE COATINGS FOR APPLICATION  | 6.04       | 90  | 5.15         |
| G239 APPLY MASKING MATERIALS TO SURFACES  | 5.96       | 95  | 3.85         |
| H324 IDENTIFY CAUSES OF CORROSION   | 5.94       | 53  | 5.96         |
| L551 APPLY POLYURETHANE COATINGS TO SURFACES USING SUCTION FEED SPRAY<br>GUNS                     | 5.92       | 76  | 5.59         |
| G294 PREPARE SURFACES USING PNEUMATIC SANDERS   | 5.86       | 91  | 5.02         |
| H325 IDENTIFY CAUSES OF PROTECTIVE COATING FAILURES   | 5.80       | 55  | 6.06         |
| H327 IDENTIFY TYPES OF PROTECTIVE COATING FAILURES  | 5.80       | 51  | 5.78         |
| J370 DETERMINE CORROSION REMOVAL LIMITS   | 5.67       | 46  | 6.58         |
| J445 REMOVE PROTECTIVE COATINGS USING PAINT REMOVERS  | 5.57       | 83  | 5.51         |
| J415 REMOVE CORROSION USING PNEUMATIC GRINDERS  | 5.53       | 59  | 5.56         |
| G258 DISPOSE OF PROTECTIVE COATING MATERIALS  | 5.51       | 79  | 4.77         |
| I352 MIX ALODINE SOLUTIONS  | 5.51       | 42  | 5.25         |
| L511 APPLY CAMOUFLAGE COATINGS TO AIRCRAFT  | 5.51       | 68  | 5.52         |
| H332 INSPECT CONDITION OF PROTECTIVE COATINGS   | 5.45       | 71  | 4.89         |
| L592 PREPARE PRIMERS FOR APPLICATION  | 5.41       | 83  | 4.86         |
| J412 REMOVE CORROSION USING PNEUMATIC ABRASIVE WHEELS   | 5.39       | 52  | 5.32         |
| J417 REMOVE CORROSION USING PNEUMATIC SANDERS   | 5.39       | 80  | 5.24         |
| G255 DISPOSE OF CHEMICAL WASTES   | 5.33       | 75  | 5.37         |
| L585 MIX PAINTS   | 5.33       | 91  | 4.52         |
| G286 PREPARE CORROSION CONTROL MATERIALS PRIOR TO JOB   | 5.25       | 82  | 4.57         |
| L601 SET UP SUCTION FEED SPRAY EQUIPMENT FOR USE  | 5.25       | 73  | 4.93         |
| M658 PERFORM OPERATOR MAINTENANCE ON SUCTION FEED SPRAY<br>EQUIPMENT                              | 5.25       | 67  | 4.87         |

TABLE 13

TASKS WITH HIGHEST TASK DIFFICULTY RATINGS  
(AFSC 427X1)

| TASKS  | TASK<br>DIFF | FIRST<br>ENLISTMENT<br>(N=481) | TNG<br>EMP |
|--|--------------|--------------------------------|------------|
|  |              | FIRST<br>ENLISTMENT<br>(N=481) | TNG<br>EMP |
| C129 WRITE STAFF STUDIES   | 7.41         | 1                              | .08        |
| A22 DRAFT BUDGET REQUIREMENTS  | 7.39         | 2                              | .33        |
| E197 NEGOTIATE CORROSION CONTROL CONTRACTS WITH PROCUREMENT                          | 7.37         | 0                              | .06        |
| A33 PLAN MOBILITY EXERCISES  | 7.07         | 2                              | .16        |
| L577 MAKE EMBLEM STENCILS USING SILKSCREEN METHOD                                    | 7.05         | 5                              | 1.92       |
| S841 PERFORM COMPOSITE PLY-TO-PLY DISBOND REPAIRS                                    | 7.01         | 0                              | .47        |
| C97 EVALUATE CORROSION CONTROL CONTRACTS   | 6.97         | 1                              | .12        |
| S840 PERFORM COMPOSITE PLY-TO-CORE DELAMINATION REPAIRS                              | 6.95         | 0                              | .47        |
| C127 WRITE CIVILIAN PERFORMANCE AND PROMOTION APPRAISALS                             | 6.94         | 1                              | .53        |
| C100 EVALUATE FINANCIAL REQUIREMENTS   | 6.93         | 0                              | .24        |
| C128 WRITE SPECIAL REPORTS   | 6.91         | 1                              | .31        |
| S846 REMOVE DAMAGED COMPOSITE AREAS WITH HIGH SPEED ROUTERS                          | 6.90         | 1                              | .47        |
| A39 REVIEW CORROSION CONTROL CONTRACTS   | 6.84         | 2                              | .16        |
| B62 DRAFT CORROSION CONTROL CONTRACTS  | 6.84         | 1                              | .29        |
| U895 PERFORM HOT-PIT AIRCRAFT REFUELING  | 6.84         | 0                              | .00        |
| U887 BUILD FUEL CELL TANKS   | 6.81         | 0                              | .59        |
| S845 REMOVE DAMAGED COMPOSITE AREAS WITH DIAMOND CUTTERS                             | 6.80         | 0                              | .00        |
| S850 REPAIR DAMAGED COMPOSITE MATERIALS WITH SPECIAL COMPOSITE MATERIALS REPAIR KITS | 6.79         | 0                              | .43        |
| D143 DEVELOP PHASE TESTS   | 6.78         | 1                              | .20        |
| S829 CLASSIFY DAMAGED COMPOSITE AREAS  | 6.78         | 2                              | 1.43       |
| U902 PERFORM SINGLE-POINT AIRCRAFT DEFUELING   | 6.78         | 0                              | .14        |
| U903 PERFORM SINGLE-POINT AIRCRAFT REFUELING   | 6.78         | 1                              | 1.41       |
| K480 IDENTIFY METALS USING HEAT TESTS  | 6.77         | 0                              | .16        |
| C95 EVALUATE CIVILIAN PERSONNEL POSITION DESCRIPTIONS                                | 6.72         | 1                              | 2.02       |
| K495 ROTARY PEEN STRESSED SURFACES   | 6.71         | 1                              |            |

moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-term personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks. Various lists of tasks, accompanied by TE and TD ratings, are contained in the TRAINING EXTRACT package and should be reviewed in detail by technical school personnel. (For additional information on TE and TD ratings, see Task Factor Administration in the SURVEY METHODOLOGY section of this report.)

#### Specialty Training Standard (STS)

Due to the upcoming RIVET WORKFORCE merger and the availability of both the present AFSC 427X1 STS (dated June 1977 w/ch 4, August 1986) and the proposed draft AFSC 458X2 STS (dated 20 November 1987), both documents were used in the analytical process. Both documents were subjected to a comprehensive review and compared to survey data. STS paragraphs containing general knowledge information, subject-matter knowledge requirements, or supervisory responsibilities were not evaluated.

AFSC 427X1 STS. Overall, the AFSC 427X1 STS provides comprehensive coverage of the work performed in the field, with survey data supporting each of the significant paragraphs and most of the subparagraphs.

Table 14 reflects six areas that require review by training personnel and subject-matter experts. Paragraphs 3a and 3d have 3-skill level proficiency codes requiring task knowledge and performance proficiency. Although they are supported at the 7-skill level by at least 20 percent members performing, the very low percent members performing (7 percent) for first-job and first-enlistment personnel, plus low to average TE and TD ratings, indicate a possible dash (-) proficiency coding for 3-skill level personnel would be more appropriate. Paragraphs 8c(2), 8c(3), 8c(5), and 14d are similar to the previous two, with the exception that the paragraphs are not supported at any level. These four paragraphs should be reviewed to determine if retention in the STS is warranted.

Tasks not matched to any element of the STS are listed at the end of the STS computer listing. These were reviewed to determine if there were any tasks concentrated around any particular functions or jobs. No particular trends were noted. Examples of technical tasks performed by 20 percent or more respondents of the STS target groups, but not referenced to any STS element, are shown in Table 15. Training personnel and subject-matter experts should review these and other eligible unreferenced tasks to determine if inclusion in the STS is justified.

AFSC 458X2 Draft STS. Due to the fact that the proposed draft AFSC 458X2 STS includes information from two separate AFSCs merged into a single AFSC, many portions of the STS have no tasks matched. Paragraphs to which the technical training personnel matched tasks were reviewed to determine whether they are supported by the survey data. Table 16 lists two paragraphs (5a and 5f) that

TABLE 14  
427X1 STS ELEMENTS REQUIRING REVIEW

| STS ITEM (WITH SELECTED SAMPLE TASKS)   | 3-LVL<br>PROF<br>CODE | PERCENT MEMBERS PERFORMING |                |                    |                  | TE*<br>RATING | TD**<br>RATING |
|---|-----------------------|----------------------------|----------------|--------------------|------------------|---------------|----------------|
|   |                       | 1ST<br>(N=221)             | JOB<br>(N=481) | 1ST ENL<br>(N=481) | DAFSC<br>(N=659) |               |                |
| 3a. USE INDEX TYPE PUBLICATIONS TO LOCATE NUMBERS AND TITLES OF STANDARD/SPECIALIZED PUBLICATIONS | 1b                    |                            |                |                    |                  |               |                |
| E183 LOCATE AF PUBLICATION NUMBERS AND TITLES USING AFR 0-2                                       |                       | 7                          | 7              | 12                 | 36               | 3.26          | 4.17           |
| E184 LOCATE DEPARTMENTAL FORMS USING AFR 0-9  |                       | 4                          | 4              | 5                  | 20               | 2.20          | 4.22           |
| 3d. INITIATE TECHNICAL ORDER IMPROVEMENTS   | b                     |                            |                |                    |                  |               |                |
| E203 PREPARE AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION)                                   |                       | 1                          | 4              | 9                  | 34               | 2.80          | 5.85           |
| E209 REVIEW AFTO FORMS 22   |                       | 1                          | 1              | 4                  | 20               | .69           | 5.36           |
| 8c(2). (DETERMINE TYPES OF METALS) MECHANICAL TESTS   | b                     |                            |                |                    |                  |               |                |
| K481 IDENTIFY METALS USING MAGNETIC TESTS   |                       | 13                         | 13             | 12                 | 18               | 2.47          | 4.71           |
| K482 IDENTIFY METALS USING SPARK TESTS  |                       | 5                          | 3              | 5                  | 6                | 2.43          | 5.06           |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)  
\*\* Average TD Rating is 5.00

TABLE 14 (CONTINUED)

## 427X1 STS ELEMENTS REQUIRING REVIEW

| STS ITEM (WITH SELECTED SAMPLE TASKS)                               | 3-LVL PROF CODE | PERCENT MEMBERS PERFORMING |             |                 |               | TE* RATING | TD** RATING |
|---|-----------------|----------------------------|-------------|-----------------|---------------|------------|-------------|
|   |                 | 1ST (N=221)                | JOB (N=481) | 1ST ENL (N=659) | DAFSC (N=303) |            |             |
| 8c(3). (DETERMINE TYPES OF METALS) CHEMICAL TESTS                   | 1a              |                            |             |                 |               |            |             |
| K476 IDENTIFY METALS USING ACID TESTS                               |                 |                            |             | 6               | 5             | 6          | 2.86        |
| K477 IDENTIFY METALS USING ALKALINE TESTS                           |                 |                            |             | 3               | 2             | 2          | 2.20        |
|   |                 |                            |             |                 |               |            | 6.46        |
|   |                 |                            |             |                 |               |            | 6.64        |
| 8c(5). (DETERMINE TYPES OF METALS) STANDARD CODES                   | b               |                            |             |                 |               |            |             |
| K483 IDENTIFY METALS USING STANDARD CODES                           |                 |                            |             | 6               | 6             | 8          | 19          |
|   |                 |                            |             |                 |               |            | 3.25        |
|   |                 |                            |             |                 |               |            | 5.55        |
| 14d. PREPARE COMPOSITE SURFACES BEFORE APPLYING PROTECTIVE COATINGS | 2b              |                            |             |                 |               |            |             |
| S843 PREPARE COMPOSITE SURFACES BEFORE APPLYING PROTECTIVE COATINGS |                 |                            |             | 13              | 14            | 10         | 11          |
|   |                 |                            |             |                 |               |            | 1.92        |
|   |                 |                            |             |                 |               |            | 5.75        |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)

\*\* Average TD Rating is 5.00

TABLE 15  
EXAMPLES OF TECHNICAL TASKS PERFORMED NOT REFERENCED TO 427X1 STS

| TASK   | PERCENT MEMBERS PERFORMING |                       |                  |                  |               |      | TD**<br>RATING |
|--|----------------------------|-----------------------|------------------|------------------|---------------|------|----------------|
|  | 1ST<br>JOB<br>(N=221)      | 1ST<br>ENL<br>(N=481) | DAFSC<br>(N=659) | DAFSC<br>(N=303) | TE*<br>RATING |      |                |
| C81 CLEAR RED DASH CONDITIONS  | 44                         | 50                    | 58               | 62               | 3.31          | 4.91 |                |
| C82 CLEAR RED DIAGONAL CONDITIONS  | 46                         | 54                    | 61               | 65               | 3.55          | 4.80 |                |
| G276 PERFORM FOREIGN OBJECT WALK TO PREVENT<br>FOREIGN OBJECT DAMAGE (FOD) | 73                         | 76                    | 72               | 54               | 3.24          | 2.71 |                |
| G317 WALK WINGS OR TAILS DURING AIRCRAFT<br>TOWING OPERATIONS              | 38                         | 42                    | 41               | 31               | 1.39          | 2.85 |                |
| M610 CHANGE DRY SPRAY BOOTH FILTERS  | 31                         | 36                    | 37               | 29               | 2.96          | 3.29 |                |
| M616 CLEAN DRY SPRAY BOOTHS  | 30                         | 33                    | 32               | 21               | 2.78          | 4.00 |                |
| M620 CLEAN FLOOR DRAINS LEADING TO<br>HAZARDOUS WASTE COLLECTION TANKS     | 20                         | 21                    | 21               | 11               | 2.35          | 4.15 |                |
| M628 CLEAN WET SPRAY BOOTHS  | 47                         | 43                    | 38               | 27               | 3.43          | 4.75 |                |
| M635 DRAIN SHOP AIR LINES  | 57                         | 59                    | 58               | 50               | 3.41          | 2.94 |                |
| M636 DRAIN WET SPRAY BOOTHS  | 34                         | 34                    | 34               | 25               | 2.86          | 3.18 |                |
| M646 INSPECT WET SPRAY BOOTHS  | 25                         | 25                    | 27               | 31               | 2.75          | 4.33 |                |
| M681 SKIM MATERIALS OFF WET SPRAY BOOTH<br>WATER                           | 30                         | 29                    | 27               | 18               | 2.39          | 2.71 |                |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)

\*\* Average TD Rating is 5.00

TABLE 16  
PROPOSED 458X2 STS ELEMENTS REQUIRING REVIEW

| STS ITEM (WITH SELECTED SAMPLE TASKS)   | 3-LVL<br>PROF<br>CODE | PERCENT MEMBERS PERFORMING |                       |                  |                  |               |
|---|-----------------------|----------------------------|-----------------------|------------------|------------------|---------------|
|   |                       | 1ST<br>JOB<br>(N=221)      | 1ST<br>ENL<br>(N=481) | DAFSC<br>(N=659) | DAFSC<br>(N=303) | TE*<br>RATING |
| 5a. USE INDEX TYPE PUBLICATIONS TO LOCATE STANDARD PUBLICATIONS                     | 2b                    |                            |                       |                  |                  |               |
| E183 LOCATE AF PUBLICATION NUMBERS AND TITLES USING AFR 0-2                         |                       |                            | 7                     | 7                | 12               | 36            |
| E184 LOCATE DEPARTMENTAL FORMS USING AFR 0-9  |                       |                            | 4                     | 4                | 5                | 20            |
|   |                       |                            |                       |                  |                  | 3.26          |
|   |                       |                            |                       |                  |                  | 4.17          |
| 5d(3). (USE TECHNICAL PUBLICATIONS WHEN PERFORMING) REPAIRS                         | 2b                    |                            |                       |                  |                  |               |
| E853 RESEARCH -3 TECHNICAL ORDER FOR EXACT REPAIR PROCEDURES ON ADVANCED COMPOSITES |                       |                            | 1                     | 2                | 1                | 4             |
|   |                       |                            |                       |                  |                  | 1.06          |
|   |                       |                            |                       |                  |                  | 5.95          |
| 5f. REPORT TECHNICAL ORDER DEFICIENCIES   | a                     |                            |                       |                  |                  |               |
| E203 PREPARE AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION)                     |                       |                            | 1                     | 4                | 9                | 34            |
| E209 REVIEW AFTO FORMS 22   |                       |                            | 1                     | 1                | 4                | 20            |
|   |                       |                            |                       |                  |                  | 2.80          |
|   |                       |                            |                       |                  |                  | .69           |
|   |                       |                            |                       |                  |                  | 5.36          |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)  
\*\* Average TD Rating is 5.00

TABLE 16 (CONTINUED)  
PROPOSED 458X2 STS ELEMENTS REQUIRING REVIEW

| STS ITEM (WITH SELECTED SAMPLE TASKS)                       | 3-LVL<br>PROF<br>CODE | PERCENT MEMBERS PERFORMING |                       |                  |                  |               |                |
|---|-----------------------|----------------------------|-----------------------|------------------|------------------|---------------|----------------|
|   |                       | 1ST<br>JOB<br>(N=221)      | 1ST<br>ENL<br>(N=481) | DAFSC<br>(N=659) | DAFSC<br>(N=303) | TE*<br>RATING | TD**<br>RATING |
| 11c(2). (IDENTIFY METAL TYPES) MECHANICAL TESTS             | 2b                    |                            |                       |                  |                  |               |                |
| K481 IDENTIFY METALS USING MAGNETIC TESTS                   |                       | 13                         | 13                    | 12               | 18               | 2.47          | 4.71           |
| K482 IDENTIFY METALS USING SPARK TESTS                      |                       | 5                          | 3                     | 5                | 6                | 2.43          | 5.06           |
| 11c(3). (IDENTIFY METAL TYPES) CHEMICAL TESTS               | 2a                    |                            |                       |                  |                  |               |                |
| K476 IDENTIFY METALS USING ACID TESTS                       |                       | 6                          | 5                     | 6                | 5                | 2.86          | 6.46           |
| K477 IDENTIFY METALS USING ALKALINE TESTS                   |                       | 3                          | 2                     | 2                | 2                | 2.20          | 6.64           |
| 11c(5). (IDENTIFY METALS TYPES) STANDARD CODES              | 2b                    |                            |                       |                  |                  |               |                |
| K483 IDENTIFY METALS USING STANDARD CODES                   |                       | 6                          | 6                     | 8                | 19               | 3.25          | 5.55           |
| 12c(2). (REPAIR AND REPLACE: FIBERGLASS)<br>CLASSIFY DAMAGE |                       | -                          | -                     | -                | -                | -             | -              |
| S831 COIN TAP FIBERGLASS TO DETERMINE<br>DEFECTS            |                       | 0                          | 3                     | 4                | 9                | 1.06          | 5.40           |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)  
\*\* Average TD Rating is 5.00

TABLE 16 (CONTINUED)  
PROPOSED 458X2 STS ELEMENTS REQUIRING REVIEW

| STS ITEM (WITH SELECTED SAMPLE TASKS)  | 3-LVL<br>PROF<br>CODE | PERCENT MEMBERS PERFORMING |                       |                  |                  | TE*<br>RATING | TD**<br>RATING |
|--|-----------------------|----------------------------|-----------------------|------------------|------------------|---------------|----------------|
|  |                       | 1ST<br>JOB<br>(N=221)      | 1ST<br>ENL<br>(N=481) | DAFSC<br>(N=659) | DAFSC<br>(N=303) |               |                |
| 12c(5). (REPAIR AND REPLACE: FIBERGLASS) REPAIR<br>BONDED HONEYCOMB COMPONENTS       | -                     |                            |                       |                  |                  |               |                |
| S851 REPAIR DAMAGED HONEYCOMB CORE WITH<br>SPECIAL HONEYCOMB STRUCTURE REPAIR<br>KIT |                       |                            |                       | 0                | 0                | 0             | .43            |
| 12d(2). (REPAIR AND REPLACE: BONDED METAL<br>HONEYCOMB) CLASSIFY DAMAGE              | -                     |                            |                       |                  |                  |               |                |
| S832 COIN TAP HONEYCOMB CORES TO DETERMINE<br>DEFECTS                                |                       |                            |                       | 0                | 2                | 4             | 6.53           |
| 12e(2). (REPAIR AND REPLACE: ARAMID BONDED<br>HONEYCOMB) CLASSIFY DAMAGE             | -                     |                            |                       |                  |                  |               |                |
| S829 CLASSIFY DAMAGED COMPOSITE AREAS  |                       |                            |                       | 2                | 2                | 2             | 1.43           |
|  |                       |                            |                       |                  |                  |               | 6.78           |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)  
\*\* Average TD Rating is 5.00

TABLE 16 (CONTINUED)  
PROPOSED 458X2 STS ELEMENTS REQUIRING REVIEW

| STS ITEM (WITH SELECTED SAMPLE TASKS)  | 3-LVL<br>PROF<br>CODE | PERCENT MEMBERS PERFORMING |                       |                  |                  |               |                |
|--|-----------------------|----------------------------|-----------------------|------------------|------------------|---------------|----------------|
|  |                       | 1ST<br>JOB<br>(N=221)      | 1ST<br>ENL<br>(N=481) | DAFSC<br>(N=659) | DAFSC<br>(N=303) | TE*<br>RATING | TD**<br>RATING |
| 12e(3). (REPAIR AND REPLACE: ARAMID FIBER COMPOSITES) REPAIR SOLID LAMINATE COMPONENTS   |                       |                            |                       |                  |                  |               |                |
|  |                       |                            |                       |                  |                  |               |                |
| S840 PERFORM COMPOSITE PLY-TO-CORE DELAMINATION REPAIRS                                  |                       | 0                          | 0                     | 0                | 0                | .47           | 6.95           |
|  |                       |                            |                       |                  |                  |               |                |
| 12e(4). (REPAIR AND REPLACE: ARAMID FIBER COMPOSITES) REPAIR BONDED HONEYCOMB COMPONENTS |                       |                            |                       |                  |                  |               |                |
|  |                       |                            |                       |                  |                  |               |                |
| S850 REPAIR DAMAGED COMPOSITE MATERIALS WITH SPECIAL COMPOSITE MATERIALS REPAIR KITS     |                       | 0                          | 0                     | 0                | 0                | .43           | 6.79           |
|  |                       |                            |                       |                  |                  |               |                |
| 12e(5). (REPAIR AND REPLACE: ARAMID FIBER COMPOSITES) REPLACE COMPONENTS                 |                       |                            |                       |                  |                  |               |                |
|  |                       |                            |                       |                  |                  |               |                |
| S852 REPLACE COMPLETE COMPOSITE STRUCTURES   |                       | 1                          | 0                     | 0                | 0                | .43           | 6.62           |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)  
\*\* Average TD Rating is 5.00

TABLE 16 (CONTINUED)  
PROPOSED 458X2 STS ELEMENTS REQUIRING REVIEW

| STS ITEM (WITH SELECTED SAMPLE TASKS)  | 3-LVL<br>PROF<br>CODE | PERCENT MEMBERS PERFORMING |                       |                  |                  |               | TE* | TD**<br>RATING |
|--|-----------------------|----------------------------|-----------------------|------------------|------------------|---------------|-----|----------------|
|  |                       | 1ST<br>JOB<br>(N=221)      | 1ST<br>ENL<br>(N=481) | DAFSC<br>(N=659) | DAFSC<br>(N=303) | TE*<br>RATING |     |                |
| 12f(2). (REPAIR AND REPLACE: GRAPHITE COMPOSITES) CLASSIFY DAMAGE                    | a                     |                            |                       |                  |                  |               |     |                |
| S842 PERFORM EVALUATION AND CLASSIFICATION OF DAMAGED COMPOSITE AREAS                |                       |                            |                       | 0                | 1                | 2             | 1   | .55 6.43       |
| 12f(3). (REPAIR AND REPLACE: GRAPHITE COMPOSITES) REPAIR SOLID LAMINATE COMPONENTS   | 1b                    |                            |                       |                  |                  |               |     |                |
| S840 PERFORM COMPOSITE PLY-TO-CORE DELAMINATION REPAIRS                              |                       |                            |                       | 0                | 0                | 0             | .47 | 6.95           |
| 12f(4). (REPAIR AND REPLACE: GRAPHITE COMPOSITES) REPAIR BONDED HONEYCOMB COMPONENTS | -                     |                            |                       |                  |                  |               |     |                |
| S850 REPAIR DAMAGED COMPOSITE MATERIALS WITH SPECIAL COMPOSITE MATERIALS REPAIR KITS |                       |                            |                       | 0                | 0                | 0             | .43 | 6.79           |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)

\*\* Average TD Rating is 5.00

TABLE 16 (CONTINUED)  
PROPOSED 458X2 STS ELEMENTS REQUIRING REVIEW

| STS ITEM (WITH SELECTED SAMPLE TASKS)   | 3-LVL<br>PROF<br>CODE | PERCENT MEMBERS PERFORMING |                       |                  |                  |               |
|---|-----------------------|----------------------------|-----------------------|------------------|------------------|---------------|
|   |                       | 1ST<br>JOB<br>(N=221)      | 1ST<br>ENL<br>(N=481) | DAFSC<br>(N=659) | DAFSC<br>(N=303) | TE*<br>RATING |
| 12f(5). (REPAIR AND REPLACE: GRAPHITE COMPOSITES) REPLACE COMPONENTS              | -                     |                            |                       |                  |                  |               |
| S852 REPLACE COMPLETE COMPOSITE STRUCTURES  | -                     | 1                          | 0                     | 0                | 0                | .43           |
| 12g(2). (REPAIR AND REPLACE: BORON COMPOSITES) CLASSIFY DAMAGE                    | -                     |                            |                       |                  |                  |               |
| S829 CLASSIFY DAMAGED COMPOSITE AREAS   | -                     | 2                          | 2                     | 2                | 5                | 1.43          |
| 12g(3). (REPAIR AND REPLACE: BORON COMPOSITES) REPAIR SOLID LAMINATE COMPONENTS   | -                     |                            |                       |                  |                  |               |
| S841 PERFORM COMPOSITE PLY-TO-PLY DISBOND REPAIRS                                 | -                     | 0                          | 0                     | 0                | 0                | .47           |
| 12g(4). (REPAIR AND REPLACE: BORON COMPOSITES) REPAIR BONDED HONEYCOMB COMPONENTS | b                     |                            |                       |                  |                  |               |
| S838 PERFORM MINOR SURFACE DAMAGE REPAIRS WITH STRUCTURAL ADHESIVE                | -                     | 0                          | 1                     | 1                | 0                | .47           |
|   |                       |                            |                       |                  |                  | 6.23          |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)  
\*\* Average TD Rating is 5.00

TABLE 16 (CONTINUED)

## PROPOSED 458X2 STS ELEMENTS REQUIRING REVIEW

| STS ITEM (WITH SELECTED SAMPLE TASKS)                                | 3-LVL PROF CODE | PERCENT MEMBERS PERFORMING |                 |               |               | TE* | TD** | RATING |
|--|-----------------|----------------------------|-----------------|---------------|---------------|-----|------|--------|
|  |                 | 1ST JOB (N=221)            | 1ST ENL (N=481) | DAFSC (N=659) | DAFSC (N=303) |     |      |        |
| 12g(5). (REPAIR AND REPLACE: BORON COMPOSITES)<br>REPLACE COMPONENTS | -               |                            |                 |               |               |     |      |        |
| S852 REPLACE COMPLETE COMPOSITE STRUCTURES                           |                 | 1                          | 0               | 0             | 0             | .43 | 6.62 |        |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)  
 \*\* Average TD Rating is 5.00

should be reviewed and evaluated to determine if the 3-level proficiency code should be changed to a dash. Although supported at the 7-skill level, the first-job and first-enlistment percentages are way below the recommended 20 percent members performing. Table 16 also provides an additional 19 subparagraphs (5d(3), 11c(2), 11c(3), 11c(5) 12c(2), 12c(5), 12d(2), 12e(2), 12e(3), 12e(4), 12e(5), 12f(2), 12f(3), 12f(4), 12f(5), 12g(2), 12g(3), 12g(4), and 12g(5)) that should be reviewed for possible deletion from the STS for the corrosion control functional area of responsibilities due to low percent members performing. If, however, they are items which will be performed by all personnel in the restructured AFSC, then retaining them in this proposed STS may be essential. This also provides information on areas where personnel presently holding AFSC 427X1 would require upgrade training because they presently are not performing these tasks.

Tasks not matched to any element of the STS are listed at the end of the STS computer listing. Potential task concentration around specific functions or jobs was reviewed and no particular trends were noted. In Table 17, examples of technical tasks performed by at least 20 percent of the target group respondents that had not been referenced to any STS elements are shown. Training personnel and subject-matter experts should review these and other eligible unreferenced tasks to determine if inclusion in the STS is justified.

#### Plan of Instruction (POI)

Technical school subject-matter experts, as previously mentioned, also matched the inventory tasks to the 3ABR42731 000 course POI, and a computer product was generated displaying the results of this match. The information presented includes the learning objectives, tasks matched, percent 1-24 and 1-48 months TAFMS respondents performing, TE, TD, and Automated Training Index (ATI) values.

Review of tasks matched to the POI reveals that most POI blocks and units of instruction are well supported by survey data, based on percentages of first-enlistment personnel performing tasks or high TE or TD ratings for pertinent tasks. There are seven units of instruction, however, which contain objectives that apparently are not totally supported by survey data and require further evaluation by training personnel and subject-matter experts (see display in Table 18). While the tasks for the first two units shown (I3a and I3b) have comparatively high TE ratings, first-enlistment personnel report only 7 percent of them perform the tasks and both have a below average TD rating. Although unit I3e has tasks with above average (5.00 or higher) TD ratings, the TE ratings are very low and the percent members performing for first-enlistment individuals does not exceed 4 percent. Each of the three units of block II have tasks which are performed by less than 13 percent of the first-term personnel. While TD ratings for these tasks are above average, the TE ratings are comparatively low. The task for the final objective (IV2h), though having above average TE and TD ratings, reflects that less than 20 percent of the criterion groups perform the task and thus does not support the objective. These objectives should be reviewed to determine if retention of these 9 hours in the ABR course is justified.

TABLE 17

458X2 PROPOSED STS  
EXAMPLES OF TECHNICAL TASKS PERFORMED NOT REFERENCED

| TASKS   | PERCENT MEMBERS PERFORMING |                       |                  |                  |               |      | TD**<br>RATING |
|---|----------------------------|-----------------------|------------------|------------------|---------------|------|----------------|
|   | 1ST<br>JOB<br>(N=221)      | 1ST<br>ENL<br>(N=481) | DAFSC<br>(N=659) | DAFSC<br>(N=303) | TE*<br>RATING |      |                |
| C81 CLEAR RED DASH CONDITIONS                               | 44                         | 50                    | 58               | 62               | 3.31          | 4.91 |                |
| C82 CLEAR RED DIAGONAL CONDITIONS                           | 46                         | 54                    | 61               | 65               | 3.55          | 4.80 |                |
| G240 APPLY NEUTRALIZING AGENTS TO CORROSIVE MATERIAL SPILLS | 34                         | 37                    | 34               | 23               | 5.10          | 5.19 |                |
| G256 DISPOSE OF CORROSION REMOVING COMPOUNDS                | 53                         | 51                    | 47               | 65               | 5.12          | 5.23 |                |
| G257 DISPOSE OF PASSIVATING SOLUTIONS                       | 37                         | 36                    | 35               | 29               | 4.98          | 5.10 |                |
| G258 DISPOSE OF PROTECTIVE COATING MATERIALS                | 81                         | 79                    | 77               | 61               | 5.51          | 4.77 |                |
| G281 PLACE CORROSION REMOVING COMPOUNDS IN STORAGE          | 57                         | 59                    | 58               | 40               | 4.00          | 3.61 |                |
| G283 PLACE PROTECTIVE COATING MATERIALS IN STORAGE          | 80                         | 80                    | 78               | 57               | 4.31          | 3.35 |                |
| H338 PERFORM PERIODIC PHASE INSPECTIONS OF AIRCRAFT         | 48                         | 52                    | 51               | 35               | 4.76          | 6.11 |                |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)  
\*\* Average TD Rating is 5.00

TABLE 18  
POI BLOCKS REFLECTING LOW FIRST-ENLISTMENT TASK PERFORMANCE  
(LESS THAN 30 PERCENT RESPONDING)

| POI REFERENCE<br>BLOCK UNIT | TIME<br>(HOURS) | SELECTED SAMPLE TASKS   | PERCENT MEMBERS    |                    |               |
|-----------------------------|-----------------|---|--------------------|--------------------|---------------|
|                             |                 |   | 1ST JOB<br>(N=221) | 1ST ENL<br>(N=481) | TE*<br>RATING |
| I 3a                        | 1               | E183 LOCATE AF PUBLICATION NUMBERS AND<br>TITLES USING AFR 0-2                                  | 7                  | 7                  | 3.26 4.17     |
| I 3b                        | 1               | E183 LOCATE AF PUBLICATION NUMBERS AND<br>TITLES USING AFR 0-2                                  | 7                  | 7                  | 3.26 4.17     |
| I 3e                        | 1               | E203 PREPARE AFTO FORMS 22 (TECHNICAL<br>ORDER SYSTEM PUBLICATION)<br>E209 REVIEW AFTO FORMS 22 | 1                  | 4                  | 2.80 5.85     |
| II 1d                       | 2               | K483 IDENTIFY METALS USING STANDARD<br>CODES  | 6                  | 6                  | 3.25 5.55     |
| II 1f                       | 1               | K481 IDENTIFY METALS USING MAGNETIC<br>TESTS<br>K482 IDENTIFY METALS USING SPARK TESTS          | 13                 | 13                 | 2.47 4.71     |
| II 1g                       | 2               | K476 IDENTIFY METALS USING ACID TESTS<br>K477 IDENTIFY METALS USING ALKALINE<br>TESTS           | 6                  | 5                  | 2.86 6.46     |
| IV 2h                       | 1               | L547 APPLY POLYURETHANE COATINGS TO<br>SURFACES USING AIRLESS SPRAY GUNS                        | 3                  | 2                  | 2.20 6.64     |
|                             |                 |   | 17                 | 19                 | 3.85 6.32     |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)  
\*\* Average TD Rating is 5.00

Additionally, some apparently significant tasks with high TE ratings, sufficiently high TD ratings, and 30 percent or more first-job or first-enlistment personnel performing were not matched to any POI blocks of instruction. This combination of factors indicates formal training may be required and resident technical training could be supported. Table 19 lists a sampling of a number of such tasks. Subject-matter experts and training personnel should perform in-depth review of these and other qualifying tasks contained in the "Tasks Not Referenced" section of the previously mentioned computer printout to determine the necessity for training and the most effective method to accomplish it.

#### JOB SATISFACTION ANALYSIS

Examination of the job satisfaction indicators for various groups gives career ladder managers a better understanding of some of the factors which may impact on job performance of airmen in the career ladder. Attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions were included in the survey booklet. The information from these questions is provided in Table 20 for the specialty jobs discussed in the SPECIALTY JOBS section of this report. An examination of the data may show how overall job satisfaction may be influenced by the type of job performed. In Table 21, another view of job satisfaction data is presented, showing data for TAFMS groups matched with similar data for a comparative sample of Mission Equipment Maintenance career ladders surveyed in 1987. These data can give a relative measure of how job satisfaction of AFSC 427X1 personnel compares with that of other similar specialties. An indication of how job satisfaction perceptions personnel within the career ladder have changed over time is provided in Table 22, where data for TAFMS groups from this survey is compared to those of the previous survey conducted in 1979.

With one exception, greater than 50 percent of the members in each specialty job report positively, finding their jobs interesting (See Table 20). The Assistant Corrosion Control Shop Chiefs, with only 46 percent expressing that their jobs are interesting, represent only 1 percent of the survey sample. Perhaps of more interest is the indication that only 50 percent of the largest job group, representing 81 percent of the sample, indicate they found their job interesting.

When comparing the data for the respondents of this survey against those of the composite 1987 sample (see Table 21), AFSC 427X1 respondents are consistently lower in all categories, with the exception of intent to reenlist. No explanation was found for what appears to be comparatively lower job satisfaction indicators for Corrosion Control personnel. A possibility may be the uncertainty and concern over potential merger of the career ladder, but no data is available to support or negate this theory.

TABLE 19

SAMPLING OF TASKS NOT REFERENCED TO 3ABR42731 POI BLOCKS  
(30 PERCENT OR MORE PERFORMING)

| TASKS   | PERCENT MEMBERS    |                    |               | TE*<br>RATING | TD**<br>RATING |
|---|--------------------|--------------------|---------------|---------------|----------------|
|   | 1ST JOB<br>(N=221) | 1ST ENL<br>(N=481) | TE*<br>RATING |               |                |
| G286 PREPARE CORROSION CONTROL MATERIALS PRIOR TO JOB                       | 80                 | 82                 | 5.25          | 4.57          |                |
| Q764 CHANGE RESPIRATOR CARTRIDGES   | 79                 | 77                 | 4.08          | 3.14          |                |
| J408 REMOVE CORROSION USING HAND WIRE BRUSHES                               | 77                 | 80                 | 4.25          | 4.24          |                |
| 0765 CHANGE RESPIRATOR FILTERS  | 75                 | 75                 | 3.96          | 3.07          |                |
| G241 APPLY WALKWAY COATINGS   | 71                 | 74                 | 4.57          | 3.82          |                |
| L588 PREPARE ENAMELS FOR APPLICATION  | 65                 | 65                 | 3.84          | 4.42          |                |
| H325 IDENTIFY CAUSES OF PROTECTIVE COATING FAILURES                         | 57                 | 55                 | 5.80          | 6.60          |                |
| G264 INVENTORY COMPOSITE TOOL KITS (CTK)                                    | 55                 | 64                 | 3.96          | 3.63          |                |
| L525 APPLY ENAMELS TO SURFACES USING SUCTION FEED SPRAY GUNS                | 53                 | 52                 | 4.65          | 5.14          |                |
| C82 CLEAR RED DIAGONAL CONDITIONS   | 46                 | 54                 | 3.55          | 4.80          |                |
| L549 APPLY POLYURETHANE COATINGS TO SURFACES USING PRESSURE FEED SPRAY GUNS | 40                 | 47                 | 4.61          | 5.66          |                |
| C124 PERFORM INSPECTIONS USING TECHNICAL ORDERS (TO)                        | 39                 | 44                 | 4.45          | 5.47          |                |
| G285 POSITION POWERED SUPPORT EQUIPMENT TO AIRCRAFT                         | 33                 | 37                 | 3.76          | 3.78          |                |

\* Mean Rating is 2.04 and Standard Deviation is 1.46 (High TE = 3.50)  
\*\* Average TD Rating is 5.00

TABLE 20  
COMPARISONS OF JOB SATISFACTION INDICATORS BY SPECIALTY JOB GROUPS  
(PERCENT MEMBERS RESPONDING)

| <u>PERCEIVED JOB</u>                     | <u>CORROSION CONTROL PERSONNEL CLUSTER</u> | <u>ASSISTANT SHOP CHIEFS</u> | <u>CORROSION CONTROL SHOP CHIEFS</u> | <u>CORROSION CONTROL SENIOR MANAGERS</u> | <u>SUPPLY/ADMINISTRATIVE SUPERVISORS</u> | <u>QUALITY ASSURANCE PERSONNEL</u> |
|--|--|------------------------------|--------------------------------------|--|--|------------------------------------|
| INTERESTING                              | 50   | 46                           | 67                                   | 65                                       | 70                                       | 75                                 |
| SO-SO                                    | 28   | 31                           | 21                                   | 18                                       | *  | 8                                  |
| DULL                                     | 21   | 23                           | 11                                   | 18                                       | 30                                       | 17                                 |
| <u>PERCEIVED USE OF TALENT</u>           |  |                              |                                      |  |  |                                    |
| FAIRLY WELL TO PERFECTLY                 | 73   | 77                           | 79                                   | 76                                       | 60                                       | 67                                 |
| LITTLE OR NOT AT ALL                     | 27   | 23                           | 21                                   | 24                                       | 40                                       | 33                                 |
| <u>PERCEIVED USE OF TRAINING</u>         |  |                              |                                      |  |  |                                    |
| FAIRLY WELL TO PERFECTLY                 | 79   | 69                           | 81                                   | 76                                       | 80                                       | 83                                 |
| LITTLE OR NOT AT ALL                     | 21   | 31                           | 19                                   | 24                                       | 20                                       | 17                                 |
| <u>SENSE OF ACCOMPLISHMENT FROM WORK</u> |  |                              |                                      |  |  |                                    |
| SATISFIED                                | 61   | 61                           | 57                                   | 53                                       | 40                                       | 75                                 |
| NEUTRAL                                  | 15   | 8                            | 19                                   | 6  | 10                                       | *                                  |
| DISSATISFIED                             | 24   | 31                           | 24                                   | 41                                       | 50                                       | 25                                 |
| <u>REENLISTMENT INTENTIONS</u>           |  |                              |                                      |  |  |                                    |
| WILL/PROBABLY WILL REENLIST              | 70   | 77                           | 67                                   | 53                                       | 80                                       | 84                                 |
| WILL NOT/PROBABLY WILL NOT REENLIST      | 25   | 15                           | 11                                   | 6  | 20                                       | 8                                  |
| WILL RETIRE                              | 3  | 8                            | 20                                   | 41                                       | *  | 8                                  |

\* Denotes less than .5 percent

TABLE 21

COMPARISON OF TAFMS GROUP JOB SATISFACTION INDICATORS  
(PERCENT MEMBERS RESPONDING)

|  | 1-48 MOS TAFMS   |                    |                       | 49-96 MOS TAFMS  |                  |                     | 97+ MOS TAFMS    |                    |                       |
|--|------------------|--------------------|-----------------------|------------------|------------------|---------------------|------------------|--------------------|-----------------------|
|  | 1987 COMP        |                    | SAMPLE**<br>(N=2,187) | 1987 COMP        |                  | SAMPLE**<br>(N=994) | 1987 COMP        |                    | SAMPLE**<br>(N=1,613) |
|  | 427X1<br>(N=481) | 427X1<br>(N=2,187) |                       | 427X1<br>(N=245) | 427X1<br>(N=994) |                     | 427X1<br>(N=370) | 427X1<br>(N=1,613) |                       |
| <u>PERCEIVED JOB</u>                     |                  |                    |                       |                  |                  |                     |                  |                    |                       |
| INTERESTING                              | 49               | 72                 |                       | 47               | 73               |                     | 61               | 78                 |                       |
| SO-SO                                    | 30               | 17                 |                       | 28               | 14               |                     | 21               | 14                 |                       |
| DULL                                     | 21               | 11                 |                       | 25               | 12               |                     | 18               | 8                  |                       |
| <u>PERCEIVED USE OF TALENT</u>           |                  |                    |                       |                  |                  |                     |                  |                    |                       |
| FAIRLY WELL TO PERFECTLY                 | 72               | 78                 |                       | 72               | 78               |                     | 74               | 82                 |                       |
| LITTLE OR NOT AT ALL                     | 27               | 22                 |                       | 28               | 22               |                     | 26               | 17                 |                       |
| <u>PERCEIVED USE OF TRAINING</u>         |                  |                    |                       |                  |                  |                     |                  |                    |                       |
| FAIRLY WELL TO PERFECTLY                 | 81               | 83                 |                       | 73               | 81               |                     | 77               | 79                 |                       |
| LITTLE OR NOT AT ALL                     | 19               | 17                 |                       | 26               | 19               |                     | 33               | 25                 |                       |
| <u>SENSE OF ACCOMPLISHMENT FROM WORK</u> |                  |                    |                       |                  |                  |                     |                  |                    |                       |
| SATISFIED                                | 63               | 70                 |                       | 58               | 69               |                     | 58               | 71                 |                       |
| NEUTRAL                                  | 16               | 13                 |                       | 14               | 11               |                     | 14               | 10                 |                       |
| DISSATISFIED                             | 21               | 17                 |                       | 27               | 20               |                     | 28               | 19                 |                       |
| <u>REENLISTMENT INTENTIONS</u>           |                  |                    |                       |                  |                  |                     |                  |                    |                       |
| WILL/PROBABLY WILL REENLIST              | 62               | 57                 |                       | 75               | 67               |                     | 76               | 73                 |                       |
| WILL NOT/PROBABLY WILL NOT REENLIST      | 36               | 43                 | *                     | 22               | 31               | 2                   | 1                | 8                  | 10                    |
| WILL RETIRE                              |                  |                    |                       |                  |                  |                     |                  | 14                 | 16                    |

\* Denotes less than .5 percent

\*\* Comparative sample composed of all career ladders surveyed in 1986 (includes AFSC 303X1, 303X3, 304X6, 321X1, 427X0, 427X2, 427X3)

TABLE 22

COMPARISON OF JOB SATISFACTION FOR CURRENT AND 1979 SURVEYS  
(PERCENT MEMBERS RESPONDING POSITIVELY)

| JOB SATISFACTION INFORMATION            | 1-48 MOS TAFMS     |                 | 49-96 MOS TAFMS    |                 | 97+ MOS TAFMS      |                 |
|---|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|
|   | CURRENT<br>(N=481) | 1979<br>(N=649) | CURRENT<br>(N=245) | 1979<br>(N=185) | CURRENT<br>(N=370) | 1979<br>(N=268) |
| JOB FAIRLY INTERESTING OR BETTER        | 49                 | 35              | 47                 | 40              | 61                 | 62              |
| TALENT UTILIZED FAIRLY WELL OR BETTER   | 72                 | 60              | 72                 | 65              | 74                 | 75              |
| TRAINING UTILIZED FAIRLY WELL OR BETTER | 81                 | 64              | 73                 | 67              | 77                 | 75              |
| FAVORABLY CONSIDERING REENLISTMENT      | 62                 | 29              | 75                 | 78              | 76                 | 79              |

When there are serious problems in a career ladder, survey respondents are usually quite free with write-in comments to complain about perceived problems in the field. Thirteen percent of the survey sample used the write-in feature to convey some type of information, yet only 2.8 percent of the comments (representing only .4 percent of the survey sample) could be characterized as complaints. There was no particular trend noted among the few comments received.

Further, as reflected in Table 22, the responses of the first-enlistment personnel from this survey show many more individuals were satisfied with all areas than those of the previous survey. Of special note is the positive perception of a great number of respondents that their talent and training are being used fairly well or better when compared to those first-termers in 1979. Additionally, those individuals who, in 1979, were first-enlistment personnel are now in the 97+ month TAFMS group, and reflect much higher percentage of personnel with favorable indicators than they reflected in 1979 (see Tables 21 and 22).

The data in the job satisfaction tables shows the Corrosion Control career ladder to be one where a majority of the personnel indicate they are satisfied with their jobs, the use of their training and talents, and feel a sense of accomplishment in what they do. They also indicate more of a willingness to reenlist than others in jobs similar to theirs.

#### ADDITIONAL ISSUES

Technical Training personnel requested data concerning the performance by Corrosion Control personnel of sealing functions and advanced composite structure and honeycomb core repair functions. Indications at that time were that the performance of these functions was widespread, and data was sought to confirm or refute the indications. Rather than use a background question to gather data, tasks were written on each area and placed in the survey instrument under two separate duty sections, Duty R (Performing Sealing Functions) and Duty S (Performing Advanced Composite Structure and Honeycomb Repair Functions). As shown in Table 6, the survey reveals that performance of these duties is not widespread. Corrosion Control personnel spend approximately 1 percent of their relative time performing sealing functions (Duty R) and less than 1 percent of their relative time performing advanced composite structure and honeycomb core repair functions (Duty T). Another indication of the lack of performance of these duties is shown in both Tables 23 and 24, which list the tasks found in Duties R and S with percent members performing each task for the total sample and MAJCOM. There are only two tasks in Duty R (R816 and R819) and one task in Duty S (S828) where the percent members performing for the total sample exceeds 20 percent. Overall, the other tasks in these areas reflect a very low percentage of performance by those surveyed. One MAJCOM however, does have a good percentage of its personnel reporting performance in Duty R tasks. Military Airlift Command has more than 20 percent of its personnel performing half of Duty R tasks. There are no real differences for

TABLE 23  
DUTY R: PERFORMING SEALING FUNCTIONS  
(PERCENT MEMBERS PERFORMING)

| TASKS  | TOTAL<br>SAMPLE<br>(N=1,097) |    | AAC<br>(N=9) |    | AFE<br>(N=86) |    | ASC<br>(N=24) |    | ATC<br>(N=92) |    | MAC<br>(N=241) |    | PACAF<br>(N=66) |    | SAC<br>(N=221) |    | TAC<br>(N=343) |    |   |
|--|------------------------------|----|--------------|----|---------------|----|---------------|----|---------------|----|----------------|----|-----------------|----|----------------|----|----------------|----|---|
|  | *                            | *  | *            | *  | *             | *  | *             | *  | *             | *  | *              | *  | *               | *  | *              | *  | *              | *  | * |
| R812 APPLY FASTENER SEALS                              | 2                            | *  | *            | *  | 4             | 1  | 5             | *  | *             | *  | *              | *  | *               | *  | *              | *  | *              | *  | * |
| R813 APPLY FILLET SEALS                                | 1                            | *  | *            | *  | 3             | 4  | *             | *  | *             | *  | *              | *  | *               | *  | *              | *  | *              | *  | * |
| R814 APPLY INJECTION SEALS                             | *                            | *  | *            | *  | 1             | 1  | *             | *  | *             | *  | *              | *  | *               | *  | *              | *  | *              | *  | * |
| R815 APPLY PERMANENT FAYING SURFACE<br>SEALS           | 2                            | *  | *            | *  | 3             | 4  | *             | *  | *             | *  | *              | *  | *               | *  | *              | *  | *              | *  | * |
| R816 APPLY PROTECTIVE COATING TO SEALED<br>AREAS       | 22                           | 56 | 14           | 17 | 18            | 44 | 21            | 18 | 18            | 18 | 18             | 18 | 14              | 14 | 14             | 14 | 14             | 14 |   |
| R817 APPLY REMOVABLE FAYING SURFACE<br>SEALS           | 1                            | *  | *            | *  | 1             | *  | 1             | 2  | *             | *  | 1              | *  | *               | *  | *              | *  | *              | *  | * |
| R818 APPLY RUBBER SEALS                                | 2                            | *  | 1            | *  | 1             | *  | 6             | *  | *             | *  | 6              | *  | *               | *  | *              | *  | 3              | 2  | 2 |
| R819 APPLY TOP COATING TO SEALED AREAS                 | 22                           | 44 | 14           | 29 | 14            | 45 | 11            | 11 | 11            | 11 | 18             | 18 | 14              | 14 | 14             | 14 | 14             | 14 |   |
| R820 APPLY WINDOW SEALS                                | 1                            | *  | 1            | *  | *             | 3  | *             | *  | *             | *  | *              | *  | *               | *  | *              | *  | *              | *  | * |
| R821 INJECT SEALANTS                                   | 2                            | *  | 1            | 8  | 5             | 2  | *             | *  | *             | *  | *              | *  | *               | *  | *              | *  | 1              | 1  | 1 |
| R822 INSPECT FOR DEFECTIVE SEALS                       | 9                            | *  | 7            | 4  | 8             | 20 | 11            | 11 | 11            | 11 | 11             | 11 | 11              | 11 | 11             | 11 | 11             | 11 |   |
| R823 INSPECT FOR DETERIORATED SEALANTS                 | 12                           | *  | 5            | 13 | 4             | 30 | 11            | 11 | 11            | 11 | 11             | 11 | 11              | 11 | 11             | 11 | 11             | 11 |   |
| R824 INSPECT FOR MISSING SEALANTS                      | 12                           | *  | 7            | 4  | 9             | 28 | 11            | 11 | 11            | 11 | 11             | 11 | 11              | 11 | 11             | 11 | 11             | 11 |   |
| R825 PREPARE SEALANT COMPOUNDS                         | 10                           | *  | 1            | 8  | 9             | 33 | 4             | 4  | 4             | 4  | 2              | 2  | 2               | 2  | 2              | 2  | 2              | 2  |   |
| R826 PREPARE SURFACES FOR SEALANT<br>APPLICATION       | 12                           | 22 | 5            | 8  | 11            | 34 | 7             | 4  | 4             | 4  | 5              | 5  | 5               | 5  | 5              | 5  | 5              | 5  |   |
| R827 WEIGH SEALANT AND ACCELERATOR<br>PARTS FOR MIXING | 2                            | *  | *            | *  | *             | *  | 7             | *  | *             | *  | *              | *  | *               | *  | *              | *  | *              | *  |   |

\* Denotes less than .5 percent

TABLE 24

**DUTY S: PERFORMING ADVANCED COMPOSITE STRUCTURE  
AND HONEYCOMB REPAIR FUNCTIONS  
(PERCENT MEMBERS PERFORMING)**

| <u>TASKS</u>   | <u>TOTAL<br/>SAMPLE<br/>(N=1,097)</u> | <u>AAC<br/>(N=9)</u> | <u>USAFC<br/>(N=86)</u> | <u>AFSC<br/>(N=24)</u> | <u>ATC<br/>(N=92)</u> | <u>MAC<br/>(N=241)</u> | <u>PACAF<br/>(N=66)</u> | <u>SAC<br/>(N=221)</u> | <u>TAC<br/>(N=343)</u> |
|--|---------------------------------------|----------------------|-------------------------|------------------------|-----------------------|------------------------|-------------------------|------------------------|------------------------|
| S828 APPLY PROTECTIVE COATINGS TO COMPOSITE SURFACES                             | 21                                    | 33                   | 16                      | 29                     | 27                    | 21                     | 43                      | 14                     | 21                     |
| S829 CLASSIFY DAMAGED COMPOSITE AREAS  | 3                                     | *                    | 5                       | 8                      | 3                     | 3                      | 4                       | 1                      | 3                      |
| S830 COIN TAP COMPOSITE SURFACES TO DETERMINE DEFECTS                            | 4                                     | 11                   | 1                       | *                      | 2                     | 6                      | *                       | 2                      | 4                      |
| S831 COIN TAP FIBERGLASS TO DETERMINE DEFECTS                                    | 5                                     | 11                   | 1                       | *                      | 3                     | 10                     | *                       | 4                      | 5                      |
| S832 COIN TAP HONEYCOMB CORES TO DETERMINE DEFECTS                               | 4                                     | 11                   | 1                       | *                      | 3                     | 6                      | *                       | 2                      | 4                      |
| S833 COORDINATE DAMAGE INSPECTION WITH NDI SECTION FOR ADVANCED COMPOSITE REPAIR | 4                                     | 11                   | 5                       | 17                     | 3                     | 7                      | 4                       | 2                      | 2                      |
| S834 CURE ADVANCED COMPOSITE REPAIRS USING HEAT-BLANKET-STACKED METHOD           | *                                     | *                    | *                       | 4                      | *                     | *                      | *                       | *                      | *                      |
| S835 CURE ADVANCED COMPOSITE REPAIRS USING HEAT-BLANKET-VACUUM METHOD            | *                                     | *                    | *                       | 4                      | 1                     | *                      | *                       | *                      | *                      |
| S836 PATCH SURFACED DAMAGE AREA WITH GRAPHITE-EPOXY PRE-PREG FABRIC              | *                                     | *                    | *                       | *                      | *                     | *                      | 4                       | *                      | *                      |
| S837 PATCH SURFACED DAMAGE AREA WITH TITANIUM FOIL PATCH PLATES                  | *                                     | *                    | *                       | *                      | *                     | *                      | *                       | *                      | *                      |
| S838 PERFORM MINOR SURFACE DAMAGE REPAIRS WITH STRUCTURAL ADHESIVE               | *                                     | *                    | *                       | *                      | 2                     | 1                      | *                       | *                      | *                      |

\* Denotes less than .5 percent

TABLE 24 (CONTINUED)

DUTY S: PERFORMING ADVANCED COMPOSITE STRUCTURE  
AND HONEYCOMB REPAIR FUNCTIONS  
(PERCENT MEMBERS PERFORMING)

| TASKS  | TOTAL               |       | AFSC<br>(N=24) | ATC<br>(N=92) | MAC<br>(N=241) | PACAF<br>(N=66) | SAC<br>(N=221) | TAC<br>(N=343) |
|--|---------------------|-------|----------------|---------------|----------------|-----------------|----------------|----------------|
|  | SAMPLE<br>(N=1,097) | (N=9) |                |               |                |                 |                |                |
| S839 PERFORM MINOR SURFACE DENT REPAIRS<br>WITH STRUCTURAL ADHESIVE                        | 1                   | *     | *              | 2             | 2              | *               | *              | *              |
| S840 PERFORM COMPOSITE PLY-TO-CORE<br>DELAMINATION REPAIRS                                 | *                   | *     | *              | 1             | *              | *               | *              | *              |
| S841 PERFORM COMPOSITE PLY-TO-PLY<br>DISBOND REPAIRS                                       | *                   | *     | *              | 1             | *              | *               | *              | *              |
| S842 PERFORM EVALUATION AND CLASSIFICATION OF DAMAGED COMPOSITE AREAS                      | 1                   | *     | 1              | 8             | 1              | 3               | *              | *              |
| S843 PREPARE COMPOSITE SURFACES BEFORE<br>APPLYING PROTECTIVE COATINGS                     | 12                  | 22    | 10             | 21            | 14             | 14              | 7              | 11             |
| S844 REMOVE COMPLETE COMPOSITE<br>STRUCTURES   | *                   | *     | 1              | *             | 1              | 4               | *              | *              |
| S845 REMOVE DAMAGED COMPOSITE AREAS<br>WITH DIAMOND CUTTERS                                | *                   | *     | 1              | *             | *              | *               | *              | *              |
| S846 REMOVE DAMAGED COMPOSITE AREAS<br>WITH HIGH SPEED ROUTERS                             | *                   | *     | 1              | *             | 1              | *               | *              | *              |
| S847 REMOVE DAMAGED COMPOSITE MATERIALS<br>WITH SPECIAL COMPOSITE MATERIALS<br>REPAIR KITS | *                   | *     | 1              | *             | *              | *               | *              | *              |
| S848 REMOVE DAMAGED HONEYCOMB CORE WITH<br>SPECIAL HONEYCOMB STRUCTURE<br>REPAIR KITS      | *                   | *     | 1              | *             | *              | *               | *              | *              |
| S849 REMOVE PROTECTIVE COATINGS FROM<br>COMPOSITE SURFACES                                 | 13                  | 22    | 10             | 13            | 24             | 15              | 7              | 14             |

\* Denotes less than .5 percent

TABLE 24 (CONTINUED)

DUTY S: PERFORMING ADVANCED COMPOSITE STRUCTURE  
AND HONEYCOMB REPAIR FUNCTIONS  
(PERCENT MEMBERS PERFORMING)

| TASKS  | TOTAL<br>SAMPLE<br>(N=1,097) | AAC<br>(N=9) | USAFC<br>(N=86) | AFSC<br>(N=24) | ATC<br>(N=92) | MAC<br>(N=241) | PACAF<br>(N=66) | SAC<br>(N=221) | TAC<br>(N=343) |
|--|------------------------------|--------------|-----------------|----------------|---------------|----------------|-----------------|----------------|----------------|
| S850 REPAIR DAMAGED COMPOSITE MATERIALS<br>WITH SPECIAL COMPOSITE MATERIALS<br>REPAIR KITS | *                            | *            | 1               | *              | *             | *              | *               | *              | *              |
| S851 REPAIR DAMAGED HONEYCOMB CORE WITH<br>SPECIAL HONEYCOMB STRUCTURE<br>REPAIR KIT       | *                            | *            | 1               | *              | 1             | *              | *               | *              | *              |
| S852 REPLACE COMPLETE COMPOSITE<br>STRUCTURES  | *                            | *            | 1               | *              | *             | 1              | 4               | *              | *              |
| S853 RESEARCH -3 TECHNICAL ORDER FOR<br>EXACT REPAIR PROCEDURES ON<br>ADVANCED COMPOSITES  | 2                            | *            | 2               | 4              | 2             | 3              | 4               | 1              | 1              |
| S854 RESEARCH -3 TECHNICAL ORDER FOR<br>EXACT REPAIR PROCEDURES ON<br>HONEYCOMB CORES      | 2                            | *            | 1               | 4              | 1             | 2              | *               | 2              |                |

\* Denotes less than .5 percent

MAJCOM reflected in Duty S. Although few Corrosion Control personnel, overall, presently report performing the tasks in Duties R and S, they will be required to perform these tasks as part of the new 458X2 AFSC.

The Air Force Corrosion Program Manager requested data be gathered on four areas concerning annual industrial physical examinations and one on cardiopulmonary resuscitation (CPR) training. The technical training personnel were interested in the proliferation of Combat Oriented Maintenance Organization (COMO) procedures. Table 25 provides the data for the total sample, first-job, first-enlistment, and DAFSC groups. In some cases, the percent of personnel having a part of the industrial physical examination, such as an audio exam, exceeds the percent members actually reporting having had taken the physical examination. This can be accounted for by the fact that those reporting positive on an audio exam, for instance, are indicating they had that exam as part of their last physical, no matter when they had taken the physical, while positive response on the physical examination question indicates that the physical itself had been taken within the last year.

#### IMPLICATIONS

The survey was requested by training personnel to obtain current task and equipment data for their evaluation of the current training programs and to provide information to be used in the merger of this AFSC and AFSC 427X5 to create a new AFSC 458X2. The current STS for AFSC 427X1 generally is well supported by survey data, with just a few elements requiring review due to nonsupporting survey data. Additionally, some tasks not keyed to any part of the STS require review for possible inclusion in the document. The same is true for the draft STS for AFSC 458X2 as it pertains to the corrosion control portion of that STS. Comparison of the survey data to the POI for the ABR course for the AFSC 427X1 career ladder, revealed that seven units of instruction (9 hours of class time) include some objectives which are not supported by the survey data. There are also a number of tasks performed by sufficient numbers of first-enlistment airmen and reflecting high TE ratings, that should also be reviewed for possible inclusion in the ABR course. Data from this survey, concerning high usage of equipment by first-term personnel, should be considered in establishing the equipment requirements of the ABR course for the new AFSC.

TABLE 25  
SPECIAL DATA REQUESTED (1ST JOB/ENL AND DAFSC)  
(PERCENT MEMBERS RESPONDING POSITIVELY)

| VARIABLE INFORMATION REQUESTED       | TOTAL<br>SAMPLE<br>(N=1,097) | 1ST JOB<br>(N=221) | 1ST ENL<br>(N=481) | DAFSC<br>42731/42751<br>(N=794) | DAFSC<br>42771<br>(N=303) |
|--------------------------------------|------------------------------|--------------------|--------------------|---------------------------------|---------------------------|
|                                      |                              |                    |                    |                                 |                           |
| INDUSTRIAL PHYSICAL WITHIN LAST YEAR | 81                           | 88                 | 85                 | 83                              | 79                        |
| PHYSICAL INCLUDED AUDIO EXAM         | 84                           | 73                 | 78                 | 81                              | 91                        |
| PHYSICAL INCLUDED BLOOD EXAM         | 76                           | 67                 | 73                 | 74                              | 81                        |
| PHYSICAL INCLUDED RESPIRATORY EXAM   | 85                           | 82                 | 83                 | 85                              | 87                        |
| CPR TRAINING COMPLETED               | 62                           | 56                 | 58                 | 62                              | 60                        |
| UNIT OPERATES UNDER COMMO PROCEDURES | 31                           | 29                 | 31                 | 30                              | 31                        |

APPENDIX A  
SELECTED REPRESENTATIVE TASKS PERFORMED  
BY CAREER LADDER STRUCTURE GROUPS

TABLE I

GROUP NUMBER AND TITLE: STG047, CORROSION CONTROL PERSONNEL  
 GROUP SIZE: 891 PERCENT MEMBERS OF SAMPLE: 81%  
 AVERAGE GRADE: E-4 AVERAGE TAFMS: 64  
 AVERAGE TICF: 59 AVERAGE TASKS PERFORMED: 194

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| TASKS   | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| G239 APPLY MASKING MATERIALS TO SURFACES                                      | 97                               |
| G297 REMOVE MASKING MATERIALS FROM SURFACES                                   | 95                               |
| L585 MIX PAINTS   | 94                               |
| G248 CLEAN WORK AREAS   | 94                               |
| G294 PREPARE SURFACES USING PNEUMATIC SANDERS                                 | 94                               |
| L591 PREPARE POLYURETHANE COATINGS FOR APPLICATION                            | 93                               |
| J452 REMOVE PROTECTIVE COATINGS USING PNEUMATIC SANDERS                       | 87                               |
| L592 PREPARE PRIMERS FOR APPLICATION  | 87                               |
| K503 WIPE DOWN METAL SURFACES WITH THINNERS PRIOR TO PAINTING                 | 87                               |
| G287 PREPARE SURFACES BY HAND SANDING   | 85                               |
| L510 APPLY AIRCRAFT MARKINGS USING STENCILS                                   | 85                               |
| L603 STRAIN PAINTS  | 85                               |
| G275 PAINT SIGNS  | 85                               |
| G286 PREPARE CORROSION CONTROL MATERIALS PRIOR TO JOB PERFORMANCE             | 84                               |
| J445 REMOVE PROTECTIVE COATINGS USING PAINT REMOVERS                          | 84                               |
| L538 APPLY LACQUERS TO SURFACES USING AEROSOL SPRAYS                          | 84                               |
| K496 SCUFF UP METAL SURFACES  | 83                               |
| L589 PREPARE EPOXY COATINGS FOR APPLICATION                                   | 83                               |
| M619 CLEAN EQUIPMENT AFTER APPLYING PROTECTIVE COATINGS                       | 83                               |
| Q772 CLEAN RESPIRATORS  | 83                               |
| G283 PLACE PROTECTIVE COATING MATERIALS IN STORAGE                            | 83                               |
| J408 REMOVE CORROSION USING HAND WIRE BRUSHES                                 | 83                               |
| G312 STENCIL SIGNS  | 82                               |
| G278 PERFORM MAINTENANCE USING TO   | 82                               |
| J417 REMOVE CORROSION USING PNEUMATIC SANDERS                                 | 82                               |
| K497 SCUFF UP PAINTED SURFACES  | 82                               |
| G242 ASSEMBLE CORROSION CONTROL MATERIALS PRIOR TO JOB<br>PERFORMANCE         | 82                               |
| G258 DISPOSE OF PROTECTIVE COATING MATERIALS                                  | 82                               |
| L551 APPLY POLYURETHANE COATINGS TO SURFACES USING SUCTION FEED<br>SPRAY GUNS | 82                               |
| Q764 CHANGE RESPIRATOR CARTRIDGES   | 80                               |

TABLE I-A

GROUP NUMBER AND TITLE: STG066, AIRCRAFT/SPRAY PAINTERS  
 GROUP SIZE: 65 PERCENT MEMBERS OF SAMPLE: 6%  
 AVERAGE GRADE: E-3 AVERAGE TAFMS: 57  
 AVERAGE TICF: 53 AVERAGE TASKS PERFORMED: 77

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| TASKS  | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| G239 APPLY MASKING MATERIALS TO SURFACES                                   | 94                               |
| L585 MIX PAINTS  | 89                               |
| G248 CLEAN WORK AREAS  | 89                               |
| G297 REMOVE MASKING MATERIALS FROM SURFACES                                | 89                               |
| G294 PREPARE SURFACES USING PNEUMATIC SANDERS                              | 88                               |
| L591 PREPARE POLYURETHANE COATINGS FOR APPLICATION                         | 77                               |
| L538 APPLY LACQUERS TO SURFACES USING AEROSOL SPRAYS                       | 77                               |
| L558 APPLY PRIMERS TO SURFACES USING SUCTION FEED SPRAY GUNS               | 75                               |
| J452 REMOVE PROTECTIVE COATINGS USING PNEUMATIC SANDERS                    | 74                               |
| K503 WIPE DOWN METAL SURFACES WITH THINNERS PRIOR TO PAINTING              | 74                               |
| Q764 CHANGE RESPIRATOR CARTRIDGES  | 74                               |
| L601 SET UP SUCTION FEED SPRAY EQUIPMENT FOR USE                           | 69                               |
| Q772 CLEAN RESPIRATORS   | 69                               |
| L551 APPLY POLYURETHANE COATINGS TO SURFACES USING SUCTION FEED SPRAY GUNS | 68                               |
| M619 CLEAN EQUIPMENT AFTER APPLYING PROTECTIVE COATINGS                    | 68                               |
| K497 SCUFF UP PAINTED SURFACES   | 68                               |
| L510 APPLY AIRCRAFT MARKINGS USING STENCILS                                | 68                               |
| L603 STRAIN PAINTS   | 66                               |
| M626 CLEAN SUCTION FEED SPRAY EQUIPMENT                                    | 63                               |
| M633 DISASSEMBLE SUCTION FEED SPRAY EQUIPMENT FOR CLEANING AND STORAGE     | 63                               |
| Q765 CHANGE RESPIRATOR FILTERS   | 63                               |
| G258 DISPOSE OF PROTECTIVE COATING MATERIALS                               | 63                               |
| G287 PREPARE SURFACES BY HAND SANDING                                      | 63                               |
| G259 DRIVE GOVERNMENT VEHICLES, SUCH AS SEDANS AND TRUCKS                  | 60                               |
| L592 PREPARE PRIMERS FOR APPLICATION                                       | 58                               |
| J417 REMOVE CORROSION USING PNEUMATIC SANDERS                              | 58                               |
| K496 SCUFF UP METAL SURFACES   | 58                               |
| J445 REMOVE PROTECTIVE COATINGS USING PAINT REMOVERS                       | 58                               |
| G242 ASSEMBLE CORROSION CONTROL MATERIALS PRIOR TO JOB PERFORMANCE         | 57                               |
| L589 PREPARE EPOXY COATINGS FOR APPLICATION                                | 57                               |

TABLE I-B

GROUP NUMBER AND TITLE: STG156, GENERAL CORROSION CONTROL PERSONNEL  
 GROUP SIZE: 125 PERCENT MEMBERS OF SAMPLE: 11%  
 AVERAGE GRADE: E-4 AVERAGE TAFMS: 49  
 AVERAGE TICF: 44 AVERAGE TASKS PERFORMED: 119

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| TASKS  | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| G239 APPLY MASKING MATERIALS TO SURFACES                                   | 99                               |
| G297 REMOVE MASKING MATERIALS FROM SURFACES                                | 99                               |
| L591 PREPARE POLYURETHANE COATINGS FOR APPLICATION                         | 98                               |
| L585 MIX PAINTS  | 98                               |
| G248 CLEAN WORK AREAS  | 96                               |
| G294 PREPARE SURFACES USING PNEUMATIC SANDERS                              | 95                               |
| L510 APPLY AIRCRAFT MARKINGS USING STENCILS                                | 91                               |
| L592 PREPARE PRIMERS FOR APPLICATION                                       | 88                               |
| J452 REMOVE PROTECTIVE COATINGS USING PNEUMATIC SANDERS                    | 84                               |
| K503 WIPE DOWN METAL SURFACES WITH THINNERS PRIOR TO PAINTING              | 84                               |
| L589 PREPARE EPOXY COATINGS FOR APPLICATION                                | 82                               |
| M619 CLEAN EQUIPMENT AFTER APPLYING PROTECTIVE COATINGS                    | 81                               |
| L603 STRAIN PAINTS   | 81                               |
| L538 APPLY LACQUERS TO SURFACES USING AEROSOL SPRAYS                       | 81                               |
| G312 STENCIL SIGNS   | 81                               |
| G275 PAINT SIGNS   | 80                               |
| K496 SCUFF UP METAL SURFACES   | 79                               |
| K497 SCUFF UP PAINTED SURFACES   | 78                               |
| J445 REMOVE PROTECTIVE COATINGS USING PAINT REMOVERS                       | 78                               |
| G286 PREPARE CORROSION CONTROL MATERIALS PRIOR TO JOB PERFORMANCE          | 77                               |
| L513 APPLY DECALS TO AIRCRAFT  | 77                               |
| G278 PERFORM MAINTENANCE USING TO  | 76                               |
| Q772 CLEAN RESPIRATORS   | 76                               |
| G287 PREPARE SURFACES BY HAND SANDING                                      | 76                               |
| L575 FABRICATE STENCILS BY MACHINE   | 75                               |
| G276 PERFORM FOREIGN OBJECT WALK TO PREVENT FOREIGN OBJECT<br>DAMAGE (FOD) | 75                               |
| L511 APPLY CAMOUFLAGE COATINGS TO AIRCRAFT                                 | 74                               |
| J417 REMOVE CORROSION USING PNEUMATIC SANDERS                              | 74                               |
| J408 REMOVE CORROSION USING HAND WIRE BRUSHES                              | 74                               |
| G258 DISPOSE OF PROTECTIVE COATING MATERIALS                               | 74                               |

TABLE I-C

GROUP NUMBER AND TITLE: STG169, MISSILE CORROSION CONTROL PERSONNEL  
 GROUP SIZE: 22 PERCENT MEMBERS OF SAMPLE: 2%  
 AVERAGE GRADE: E-3 AVERAGE TAFMS: 33  
 AVERAGE TICF: 31 AVERAGE TASKS PERFORMED: 196

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| <u>TASKS</u>  | <u>PERCENT<br/>MEMBERS<br/>PERFORMING</u> |
|---|---|
| L524 APPLY ENAMELS TO SURFACES USING ROLLERS                          | 100                                       |
| J408 REMOVE CORROSION USING HAND WIRE BRUSHES                         | 100                                       |
| G318 WASH GOVERNMENT VEHICLES   | 100                                       |
| G239 APPLY MASKING MATERIALS TO SURFACES                              | 100                                       |
| J396 REMOVE CORROSION USING ABRASIVE PAPER OR CLOTH                   | 100                                       |
| J411 REMOVE CORROSION USING NEEDLE DE-SCALERS                         | 100                                       |
| H334 INSPECT SHELF LIFE OF PROTECTIVE COATINGS                        | 100                                       |
| G259 DRIVE GOVERNMENT VEHICLES, SUCH AS SEDANS AND TRUCKS             | 95  |
| L521 APPLY ENAMELS TO SURFACES USING BRUSHES                          | 95  |
| G266 LOAD SUPPLIES ON VEHICLES  | 95  |
| G286 PREPARE CORROSION CONTROL MATERIALS PRIOR TO JOB PERFORMANCE     | 95  |
| G242 ASSEMBLE CORROSION CONTROL MATERIALS PRIOR TO JOB<br>PERFORMANCE | 95  |
| G243 ATTACH RESTRAINT OR SAFETY HARNESSES                             | 95  |
| J444 REMOVE PROTECTIVE COATINGS USING NEEDLE DE-SCALERS               | 95  |
| H332 INSPECT CONDITION OF PROTECTIVE COATINGS                         | 95  |
| G283 PLACE PROTECTIVE COATING MATERIALS IN STORAGE                    | 95  |
| G241 APPLY WALKWAY COATINGS   | 95  |
| G278 PERFORM MAINTENANCE USING TO                                     | 91  |
| 0696 APPLY CORROSION PREVENTIVE COMPOUND (CPC) TO PYLONS              | 91  |
| G280 PERFORM PREOPERATIONAL INSPECTIONS OF GOVERNMENT VEHICLES        | 91  |
| N687 DESTROY CODE MATERIALS   | 91  |
| L557 APPLY PRIMERS TO SURFACES USING ROLLERS                          | 91  |
| L555 APPLY PRIMERS TO SURFACES USING BRUSHES                          | 91  |
| G248 CLEAN WORK AREAS   | 91  |
| M644 INSPECT SAFETY EQUIPMENT   | 91  |
| G294 PREPARE SURFACES USING PNEUMATIC SANDERS                         | 91  |
| N690 OBTAIN CODES FROM SECURITY CONTROL CENTERS                       | 91  |
| N691 OPERATE COMMUNICATION EQUIPMENT                                  | 91  |
| K502 WIPE DOWN METAL SURFACES WITH SOLVENTS PRIOR TO PAINTING         | 91  |
| G287 PREPARE SURFACES BY HAND SANDING                                 | 91  |

TABLE I-D

GROUP NUMBER AND TITLE: STG196, EXPERIENCED CORROSION CONTROL PERSONNEL  
 GROUP SIZE: 461 PERCENT MEMBERS OF SAMPLE: 42%  
 AVERAGE GRADE: E-4 AVERAGE TAFMS: 57  
 AVERAGE TICF: 51 AVERAGE TASKS PERFORMED: 197

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| TASKS   | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| L591 PREPARE POLYURETHANE COATINGS FOR APPLICATION                            | 98                               |
| G239 APPLY MASKING MATERIALS TO SURFACES                                      | 97                               |
| G294 PREPARE SURFACES USING PNEUMATIC SANDERS                                 | 97                               |
| G297 REMOVE MASKING MATERIALS FROM SURFACES                                   | 97                               |
| L585 MIX PAINTS   | 96                               |
| G248 CLEAN WORK AREAS   | 95                               |
| J452 REMOVE PROTECTIVE COATINGS USING PNEUMATIC SANDERS                       | 94                               |
| L592 PREPARE PRIMERS FOR APPLICATION  | 93                               |
| L603 STRAIN PAINTS  | 93                               |
| K503 WIPE DOWN METAL SURFACES WITH THINNERS PRIOR TO PAINTING                 | 92                               |
| J445 REMOVE PROTECTIVE COATINGS USING PAINT REMOVERS                          | 92                               |
| L551 APPLY POLYURETHANE COATINGS TO SURFACES USING SUCTION FEED<br>SPRAY GUNS | 91                               |
| G286 PREPARE CORROSION CONTROL MATERIALS PRIOR TO JOB PERFORMANCE             | 91                               |
| G287 PREPARE SURFACES BY HAND SANDING   | 90                               |
| K496 SCUFF UP METAL SURFACES  | 90                               |
| L510 APPLY AIRCRAFT MARKINGS USING STENCILS                                   | 90                               |
| J417 REMOVE CORROSION USING PNEUMATIC SANDERS                                 | 90                               |
| L601 SET UP SUCTION FEED SPRAY EQUIPMENT FOR USE                              | 90                               |
| M622 CLEAN PNEUMATICALLY POWERED TOOLS  | 89                               |
| G275 PAINT SIGNS  | 89                               |
| J408 REMOVE CORROSION USING HAND WIRE BRUSHES                                 | 89                               |
| L538 APPLY LACQUERS TO SURFACES USING AEROSOL SPRAYS                          | 89                               |
| G283 PLACE PROTECTIVE COATING MATERIALS IN STORAGE                            | 89                               |
| M619 CLEAN EQUIPMENT AFTER APPLYING PROTECTIVE COATINGS                       | 88                               |
| K497 SCUFF UP PAINTED SURFACES  | 88                               |
| L589 PREPARE EPOXY COATINGS FOR APPLICATION                                   | 88                               |
| G278 PERFORM MAINTENANCE USING TO   | 88                               |
| M633 DISASSEMBLE SUCTION FEED SPRAY EQUIPMENT FOR CLEANING AND<br>STORAGE     | 88                               |
| Q772 CLEAN RESPIRATORS  | 88                               |
| G312 STENCIL SIGNS  | 88                               |

TABLE I-E

GROUP NUMBER AND TITLE: STG201, SHIFT/CREW LEADERS  
 GROUP SIZE: 142 PERCENT MEMBERS OF SAMPLE: 13%  
 AVERAGE GRADE: E-5 AVERAGE TAFMS: 104  
 AVERAGE TICF: 97 AVERAGE TASKS PERFORMED: 334

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| <u>TASKS</u>  | <u>PERCENT<br/>MEMBERS<br/>PERFORMING</u> |
|---|---|
| L585 MIX PAINTS   | 100                                       |
| L591 PREPARE POLYURETHANE COATINGS FOR APPLICATION                | 99  |
| G239 APPLY MASKING MATERIALS TO SURFACES                          | 99  |
| G283 PLACE PROTECTIVE COATING MATERIALS IN STORAGE                | 97  |
| G294 PREPARE SURFACES USING PNEUMATIC SANDERS                     | 96  |
| G297 REMOVE MASKING MATERIALS FROM SURFACES                       | 96  |
| L589 PREPARE EPOXY COATINGS FOR APPLICATION                       | 96  |
| L592 PREPARE PRIMERS FOR APPLICATION                              | 96  |
| G248 CLEAN WORK AREAS   | 96  |
| G275 PAINT SIGNS  | 96  |
| M640 INSPECT AIR HOSE FITTINGS                                    | 96  |
| G278 PERFORM MAINTENANCE USING TO                                 | 95  |
| H332 INSPECT CONDITION OF PROTECTIVE COATINGS                     | 95  |
| L575 FABRICATE STENCILS BY MACHINE                                | 95  |
| G286 PREPARE CORROSION CONTROL MATERIALS PRIOR TO JOB PERFORMANCE | 95  |
| G258 DISPOSE OF PROTECTIVE COATING MATERIALS                      | 95  |
| L574 FABRICATE STENCILS BY HAND                                   | 94  |
| H334 INSPECT SHELF LIFE OF PROTECTIVE COATINGS                    | 94  |
| J408 REMOVE CORROSION USING HAND WIRE BRUSHES                     | 94  |
| G264 INVENTORY COMPOSITE TOOL KITS (CTK)                          | 94  |
| J452 REMOVE PROTECTIVE COATINGS USING PNEUMATIC SANDERS           | 94  |
| L510 APPLY AIRCRAFT MARKINGS USING STENCILS                       | 94  |
| K503 WIPE DOWN METAL SURFACES WITH THINNERS PRIOR TO PAINTING     | 94  |
| G312 STENCIL SIGNS  | 94  |
| H325 IDENTIFY CAUSES OF PROTECTIVE COATING FAILURES               | 94  |
| M641 INSPECT AIR HOSES  | 94  |
| M625 CLEAN STENCIL MACHINES                                       | 94  |
| J445 REMOVE PROTECTIVE COATINGS USING PAINT REMOVERS              | 93  |
| M644 INSPECT SAFETY EQUIPMENT                                     | 93  |
| G287 PREPARE SURFACES BY HAND SANDING                             | 93  |

TABLE VI

GROUP NUMBER AND TITLE: STG113, ASSISTANT SHOP CHIEFS  
 GROUP SIZE: 13 PERCENT MEMBERS OF SAMPLE: 1%  
 AVERAGE GRADE: E-5 AVERAGE TAFMS: 144  
 AVERAGE TICF: 137 AVERAGE TASKS PERFORMED: 194

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| TASKS  | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| F224 MAINTAIN AF FORMS 2413 (SUPPLY CONTROL LOG FORMS)   | 100                              |
| F234 REVIEW DAILY DOCUMENT REGISTERS (D04)   | 100                              |
| G264 INVENTORY COMPOSITE TOOL KITS (CTK)   | 100                              |
| F232 PREPARE DD FORMS 1348-6 (DOD SINGLE LINE ITEM REQUISITION SYSTEM DOCUMENT (MANUAL - LONG FORM)) | 100                              |
| G248 CLEAN WORK AREAS  | 100                              |
| Q785 INSPECT FACE SHIELDS FOR CONDITION AND CLEANLINESS  | 100                              |
| F222 INITIATE AF FORMS 2005 (ISSUE/TURN IN REQUEST)  | 92                               |
| F226 MAINTAIN MASTER BENCH STOCK LISTINGS  | 92                               |
| F237 REVIEW MONTHLY DUE-OUT VALIDATION REPORTS   | 92                               |
| G259 DRIVE GOVERNMENT VEHICLES, SUCH AS SEDANS AND TRUCKS  | 92                               |
| Q781 INSPECT CARTRIDGE RESPIRATORS   | 92                               |
| M641 INSPECT AIR HOSES   | 92                               |
| M670 REPLACE AIR HOSES   | 92                               |
| M663 REMOVE AIR HOSE FITTINGS  | 92                               |
| H334 INSPECT SHELF LIFE OF PROTECTIVE COATINGS   | 85                               |
| C87 EVALUATE USE OF SUPPLIES   | 85                               |
| E215 REVIEW PRIORITY MONITOR REPORTS (D-18)  | 85                               |
| G265 INVENTORY OUTSIDE STORAGE FACILITIES  | 85                               |
| B64 ESTABLISH BENCH STOCK REQUIREMENTS   | 85                               |
| F238 UPDATE MONTHLY DUE-OUT VALIDATION REPORTS   | 85                               |
| F235 REVIEW DD FORMS 1348-1  | 85                               |
| G281 PLACE CORROSION REMOVING COMPOUNDS IN STORAGE   | 85                               |
| F221 INITIATE AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)  | 85                               |
| Q782 INSPECT COVERALLS FOR CONDITION AND CLEANLINESS   | 85                               |
| L585 MIX PAINTS  | 85                               |
| L601 SET UP SUCTION FEED SPRAY EQUIPMENT FOR USE   | 85                               |
| Q764 CHANGE RESPIRATOR CARTRIDGES  | 85                               |
| Q765 CHANGE RESPIRATOR FILTERS   | 85                               |
| M640 INSPECT AIR HOSE FITTINGS   | 85                               |
| G239 APPLY MASKING MATERIALS TO SURFACES   | 85                               |

TABLE IV

GROUP NUMBER AND TITLE: STG096, CORROSION CONTROL SHOP CHIEFS CLUSTER  
 GROUP SIZE: 70 PERCENT MEMBERS OF SAMPLE: 6%  
 AVERAGE GRADE: E-6 AVERAGE TAFMS: 178  
 AVERAGE TICF: 169 AVERAGE TASKS PERFORMED: 220

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| TASKS  | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| C126 WRITE APR   | 100                              |
| B71 ORIENT NEWLY ASSIGNED PERSONNEL                            | 97                               |
| B51 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS | 96                               |
| F221 INITIATE AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)          | 96                               |
| A36 PLAN WORK ASSIGNMENTS                                      | 94                               |
| A46 SCHEDULE WORK ASSIGNMENTS                                  | 94                               |
| F234 REVIEW DAILY DOCUMENT REGISTERS (D04)                     | 94                               |
| A45 SCHEDULE LEAVES  | 93                               |
| C101 EVALUATE INDIVIDUALS JOB PERFORMANCE                      | 91                               |
| B76 SUPERVISE CORROSION CONTROL SPECIALISTS (AFSC 4275T)       | 91                               |
| A1 ASSIGN PERSONNEL TO DUTY POSITIONS                          | 91                               |
| F237 REVIEW MONTHLY DUE-OUT VALIDATION REPORTS                 | 90                               |
| D131 ASSIGN OJT TRAINERS                                       | 90                               |
| A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL                | 90                               |
| B65 ESTABLISH WORK PRIORITIES                                  | 89                               |
| E215 REVIEW PRIORITY MONITOR REPORTS (D-18)                    | 89                               |
| A9 COORDINATE IN-SHOP WORK PROGRESS WITH JOB CONTROL           | 89                               |
| B58 DIRECT SHOP MAINTENANCE ACTIVITIES                         | 87                               |
| B59 DIRECT UTILIZATION OF CORROSION CONTROL SHOP EQUIPMENT     | 87                               |
| A10 COORDINATE IN-SHOP WORK PROGRESS WITH MAINTENANCE          | 87                               |
| A31 PLAN DETAILS OR ADDITIONAL DUTIES                          | 87                               |
| C87 EVALUATE USE OF SUPPLIES                                   | 87                               |
| A44 SCHEDULE DETAILS OR ADDITIONAL DUTIES                      | 87                               |
| E210 REVIEW AFTO FORMS 349                                     | 86                               |
| D158 MAINTAIN TRAINING RECORDS                                 | 84                               |
| C119 INDORSE AIRMAN PERFORMANCE REPORTS (APR)                  | 84                               |
| A28 ESTABLISH REQUIREMENTS FOR TOOLS                           | 84                               |
| D140 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION           | 83                               |
| B64 ESTABLISH BENCH STOCK REQUIREMENTS                         | 83                               |
| G264 INVENTORY COMPOSITE TOOL KITS (CTK)                       | 83                               |

TABLE IV-A

GROUP NUMBER AND TITLE: STG145, MISSILE SHOP CHIEFS  
 GROUP SIZE: 13 PERCENT MEMBERS OF SAMPLE: 1%  
 AVERAGE GRADE: E-6 AVERAGE TAFMS: 159  
 AVERAGE TICF: 134 AVERAGE TASKS PERFORMED: 113

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| TASKS   | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| F234 REVIEW DAILY DOCUMENT REGISTERS (D04)                              | 100                              |
| C126 WRITE APR  | 100                              |
| B71 ORIENT NEWLY ASSIGNED PERSONNEL                                     | 100                              |
| F221 INITIATE AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)                   | 100                              |
| B58 DIRECT SHOP MAINTENANCE ACTIVITIES                                  | 92                               |
| A36 PLAN WORK ASSIGNMENTS   | 92                               |
| A45 SCHEDULE LEAVES   | 92                               |
| B51 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS          | 92                               |
| E215 REVIEW PRIORITY MONITOR REPORTS (D-18)                             | 92                               |
| C101 EVALUATE INDIVIDUALS JOB PERFORMANCE                               | 85                               |
| B65 ESTABLISH WORK PRIORITIES   | 85                               |
| A46 SCHEDULE WORK ASSIGNMENTS   | 85                               |
| A9 COORDINATE IN-SHOP WORK PROGRESS WITH JOB CONTROL                    | 85                               |
| E210 REVIEW AFTO FORMS 349  | 85                               |
| F237 REVIEW MONTHLY DUE-OUT VALIDATION REPORTS                          | 85                               |
| A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL                         | 85                               |
| A10 COORDINATE IN-SHOP WORK PROGRESS WITH MAINTENANCE                   | 77                               |
| E190 MAINTAIN TO FILES  | 77                               |
| A44 SCHEDULE DETAILS OR ADDITIONAL DUTIES                               | 77                               |
| F222 INITIATE AF FORMS 2005 (ISSUE/TURN IN REQUEST)                     | 77                               |
| B76 SUPERVISE CORROSION CONTROL SPECIALISTS (AFSC 42751)                | 77                               |
| D158 MAINTAIN TRAINING RECORDS  | 77                               |
| A1 ASSIGN PERSONNEL TO DUTY POSITIONS                                   | 77                               |
| B59 DIRECT UTILIZATION OF CORROSION CONTROL SHOP EQUIPMENT              | 77                               |
| D131 ASSIGN OJT TRAINERS  | 77                               |
| A37 PREPARE BRIEFINGS   | 77                               |
| B66 IMPLEMENT SAFETY PROGRAMS   | 69                               |
| A6 COORDINATE DISPOSAL OF WASTE MATERIALS WITH HAZARDOUS WASTE MONITORS | 69                               |
| F238 UPDATE MONTHLY DUE-OUT VALIDATION REPORTS                          | 69                               |
| A31 PLAN DETAILS OR ADDITIONAL DUTIES                                   | 69                               |

TABLE IV-B

GROUP NUMBER AND TITLE: STG196, GENERAL SHOP CHIEFS  
 GROUP SIZE: 55 PERCENT MEMBERS OF SAMPLE: 5%  
 AVERAGE GRADE: E-6 AVERAGE TAFMS: 185  
 AVERAGE TICF: 167 AVERAGE TASKS PERFORMED: 242

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| TASKS  | PERCENT<br>MEMBERS<br>PERFORMING |
|--|----------------------------------|
| C126 WRITE APR   | 100                              |
| A46 SCHEDULE WORK ASSIGNMENTS                                  | 96                               |
| B51 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS | 96                               |
| A45 SCHEDULE LEAVES  | 96                               |
| B71 ORIENT NEWLY ASSIGNED PERSONNEL                            | 96                               |
| A28 ESTABLISH REQUIREMENTS FOR TOOLS                           | 96                               |
| A36 PLAN WORK ASSIGNMENTS                                      | 95                               |
| B76 SUPERVISE CORROSION CONTROL SPECIALISTS (AFSC 42751)       | 95                               |
| A1 ASSIGN PERSONNEL TO DUTY POSITIONS                          | 95                               |
| D131 ASSIGN OJT TRAINERS                                       | 95                               |
| F221 INITIATE AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)          | 95                               |
| C101 EVALUATE INDIVIDUALS JOB PERFORMANCE                      | 93                               |
| F234 REVIEW DAILY DOCUMENT REGISTERS (D04)                     | 93                               |
| A7 COORDINATE FLIGHTLINE DISPATCH WORK WITH JOB CONTROL        | 93                               |
| C119 INDORSE AIRMAN PERFORMANCE REPORTS (APR)                  | 93                               |
| F237 REVIEW MONTHLY DUE-OUT VALIDATION REPORTS                 | 93                               |
| C87 EVALUATE USE OF SUPPLIES                                   | 93                               |
| C86 EVALUATE USE OF EQUIPMENT                                  | 93                               |
| C83 CLEAR RED X CONDITIONS                                     | 93                               |
| E215 REVIEW PRIORITY MONITOR REPORTS (D-18)                    | 91                               |
| A10 COORDINATE IN-SHOP WORK PROGRESS WITH MAINTENANCE          | 91                               |
| A31 PLAN DETAILS OR ADDITIONAL DUTIES                          | 91                               |
| A44 SCHEDULE DETAILS OR ADDITIONAL DUTIES                      | 91                               |
| H325 IDENTIFY CAUSES OF PROTECTIVE COATING FAILURES            | 91                               |
| A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL                | 91                               |
| B65 ESTABLISH WORK PRIORITIES                                  | 89                               |
| B77 SUPERVISE CORROSION CONTROL SUPERVISORS (AFSC 42771)       | 89                               |
| B59 DIRECT UTILIZATION OF CORROSION CONTROL SHOP EQUIPMENT     | 89                               |
| G264 INVENTORY COMPOSITE TOOL KITS (CTK)                       | 89                               |
| A9 COORDINATE IN-SHOP WORK PROGRESS WITH JOB CONTROL           | 89                               |

TABLE V

GROUP NUMBER AND TITLE: STG101, SENIOR CORROSION CONTROL MANAGERS  
 GROUP SIZE: 17 PERCENT MEMBERS OF SAMPLE: 2%  
 AVERAGE GRADE: E-7 AVERAGE TAFMS: 205  
 AVERAGE TICF: 160 AVERAGE TASKS PERFORMED: 83

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| TASKS   | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| B51 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS          | 100                              |
| C126 WRITE APR  | 94                               |
| A1 ASSIGN PERSONNEL TO DUTY POSITIONS                                   | 94                               |
| B71 ORIENT NEWLY ASSIGNED PERSONNEL                                     | 94                               |
| A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL                         | 94                               |
| B65 ESTABLISH WORK PRIORITIES   | 82                               |
| B70 INTERPRET DIRECTIVES FOR SUBORDINATES                               | 82                               |
| A25 ESTABLISH PERFORMANCE STANDARDS                                     | 82                               |
| C119 INDORSE AIRMAN PERFORMANCE REPORTS (APR)                           | 82                               |
| E212 REVIEW MAINTENANCE PERSONNEL LISTINGS                              | 82                               |
| C83 CLEAR RED X CONDITIONS  | 82                               |
| B77 SUPERVISE CORROSION CONTROL SUPERVISORS (AFSC 42771)                | 76                               |
| A46 SCHEDULE WORK ASSIGNMENTS   | 76                               |
| E215 REVIEW PRIORITY MONITOR REPORTS (D-18)                             | 76                               |
| A36 PLAN WORK ASSIGNMENTS   | 76                               |
| C128 WRITE SPECIAL REPORTS  | 76                               |
| C101 EVALUATE INDIVIDUALS JOB PERFORMANCE                               | 71                               |
| B76 SUPERVISE CORROSION CONTROL SPECIALISTS (AFSC 42751)                | 71                               |
| B58 DIRECT SHOP MAINTENANCE ACTIVITIES                                  | 71                               |
| A45 SCHEDULE LEAVES   | 71                               |
| F237 REVIEW MONTHLY DUE-OUT VALIDATION REPORTS                          | 71                               |
| A6 COORDINATE DISPOSAL OF WASTE MATERIALS WITH HAZARDOUS WASTE MONITORS | 71                               |
| A5 COORDINATE CORROSION PROBLEMS WITH DEPOTS                            | 71                               |
| E218 WRITE CORRESPONDENCE   | 65                               |
| C96 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS                      | 65                               |
| C87 EVALUATE USE OF SUPPLIES  | 65                               |
| F234 REVIEW DAILY DOCUMENT REGISTERS (D04)                              | 65                               |
| A23 ESTABLISH OFFICE INSTRUCTIONS (OI)                                  | 65                               |
| A29 ESTABLISH STANDARD OPERATING PROCEDURES (SOP)                       | 65                               |
| B75 SUPERVISE CIVILIAN PERSONNEL  | 59                               |

TABLE III

GROUP NUMBER AND TITLE: STG090, SUPPLY/ADMINISTRATIVE SUPERVISORY PERSONNEL  
 GROUP SIZE: 10 PERCENT MEMBERS OF SAMPLE: 1%  
 AVERAGE GRADE: E-6 AVERAGE TAFMS: 146  
 AVERAGE TICF: 136 AVERAGE TASKS PERFORMED: 64

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| TASKS   | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| B76 SUPERVISE CORROSION CONTROL SPECIALISTS (AFSC 42751)                            | 100                              |
| A36 PLAN WORK ASSIGNMENTS   | 100                              |
| B51 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS                      | 100                              |
| A7 COORDINATE FLIGHTLINE DISPATCH WORK WITH JOB CONTROL                             | 100                              |
| A46 SCHEDULE WORK ASSIGNMENTS   | 90                               |
| C126 WRITE APR  | 90                               |
| B71 ORIENT NEWLY ASSIGNED PERSONNEL   | 90                               |
| A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL                                     | 90                               |
| F224 MAINTAIN AF FORMS 2413 (SUPPLY CONTROL LOG FORMS)                              | 80                               |
| A10 COORDINATE IN-SHOP WORK PROGRESS WITH MAINTENANCE                               | 80                               |
| C83 CLEAR RED X CONDITIONS  | 80                               |
| A1 ASSIGN PERSONNEL TO DUTY POSITIONS   | 80                               |
| E204 PREPARE AFTO FORMS 349 TO INCLUDE USE OF APPLICABLE -06 CODE<br>MANUALS        | 70                               |
| F222 INITIATE AF FORMS 2005 (ISSUE/TURN IN REQUEST)                                 | 70                               |
| F234 REVIEW DAILY DOCUMENT REGISTERS (D04)  | 70                               |
| E215 REVIEW PRIORITY MONITOR REPORTS (D-18)   | 70                               |
| B74 SUPERVISE APPRENTICE CORROSION CONTROL SPECIALISTS (AFSC<br>42731)              | 70                               |
| A9 COORDINATE IN-SHOP WORK PROGRESS WITH JOB CONTROL                                | 70                               |
| C81 CLEAR RED DASH CONDITIONS   | 70                               |
| C82 CLEAR RED DIAGONAL CONDITIONS   | 70                               |
| E193 MAKE ENTRIES ON AFTO FORMS 781A (MAINTENANCE DISCREPANCY<br>AND WORK DOCUMENT) | 70                               |
| F221 INITIATE AF FORMS 1297 (TEMPORARY ISSUE RECEIPT)                               | 70                               |
| B59 DIRECT UTILIZATION OF CORROSION CONTROL SHOP EQUIPMENT                          | 60                               |
| F226 MAINTAIN MASTER BENCH STOCK LISTINGS   | 60                               |
| B75 SUPERVISE CIVILIAN PERSONNEL  | 60                               |
| E186 MAINTAIN AF FORMS 2430 (SPECIALIST DISPATCH CONTROL LOG)                       | 60                               |
| F237 REVIEW MONTHLY DUE-OUT VALIDATION REPORTS                                      | 60                               |
| F238 UPDATE MONTHLY DUE-OUT VALIDATION REPORTS                                      | 60                               |
| E210 REVIEW AFTO FORMS 349  | 60                               |
| C101 EVALUATE INDIVIDUALS JOB PERFORMANCE   | 60                               |

TABLE II

GROUP NUMBER AND TITLE: STG049, QUALITY ASSURANCE PERSONNEL  
 GROUP SIZE: 12 PERCENT MEMBERS OF SAMPLE: 1%  
 AVERAGE GRADE: E-6 AVERAGE TAFMS: 130  
 AVERAGE TICF: 130 AVERAGE TASKS PERFORMED: 91

TASKS ARE LISTED IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

| TASKS   | PERCENT<br>MEMBERS<br>PERFORMING |
|---|----------------------------------|
| C124 PERFORM INSPECTIONS USING TECHNICAL ORDERS (TO)  | 100                              |
| Q795 INSPECT RESPIRATORS FOR CONDITION AND CLEANLINESS  | 92                               |
| Q786 INSPECT GOGGLES FOR CONDITION AND CLEANLINESS  | 92                               |
| Q785 INSPECT FACE SHIELDS FOR CONDITION AND CLEANLINESS   | 92                               |
| E185 LOCATE TECHNICAL ORDER (TO) INFORMATION USING TO INDEXES                                     | 92                               |
| C96 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS  | 83                               |
| Q797 INSPECT RUBBER GLOVES FOR CONDITION AND CLEANLINESS  | 83                               |
| H332 INSPECT CONDITION OF PROTECTIVE COATINGS   | 75                               |
| C102 EVALUATE INSPECTION PROCEDURES   | 75                               |
| Q781 INSPECT CARTRIDGE RESPIRATORS  | 75                               |
| H327 IDENTIFY TYPES OF PROTECTIVE COATING FAILURES  | 75                               |
| H325 IDENTIFY CAUSES OF PROTECTIVE COATING FAILURES   | 75                               |
| H326 IDENTIFY TYPES OF CORROSION  | 75                               |
| M644 INSPECT SAFETY EQUIPMENT   | 67                               |
| C101 EVALUATE INDIVIDUALS JOB PERFORMANCE   | 67                               |
| C105 EVALUATE MAINTENANCE OF EQUIPMENT  | 67                               |
| R824 INSPECT FOR MISSING SEALANTS   | 67                               |
| R823 INSPECT FOR DETERIORATED SEALANTS  | 67                               |
| H333 INSPECT CONDITION OF PROTECTIVE COMPOUNDS  | 67                               |
| H331 INSPECT AREAS FOR CORROSION USING HAND EQUIPMENT, SUCH AS<br>FLASHLIGHTS, PROBES, OR MIRRORS | 67                               |
| C97 EVALUATE CORROSION CONTROL CONTRACTS  | 67                               |
| C91 EVALUATE ADMINISTRATIVE PROCEDURES  | 67                               |
| H334 INSPECT SHELF LIFE OF PROTECTIVE COATINGS  | 67                               |
| H323 DETERMINE SEVERITY OF CORROSION  | 67                               |
| K472 DETERMINE METAL SURFACE CLEANLINESS BY VISUAL INSPECTIONS                                    | 58                               |
| E175 COMPILE RECORDS FROM INSPECTIONS SURVEILLANCES   | 58                               |
| C86 EVALUATE USE OF EQUIPMENT   | 58                               |
| Q788 INSPECT HARNESS CONDITIONS   | 58                               |
| D151 EVALUATE TRAINING METHODS  | 58                               |
| D153 EVALUATE TRAINING TECHNIQUES   | 58                               |